CD RECEIVER

KDC-3023R
KDC-4024/V/Y/YV

SERVICE MANUAL

KENWOOD

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B53-0001-00 (N) 2139

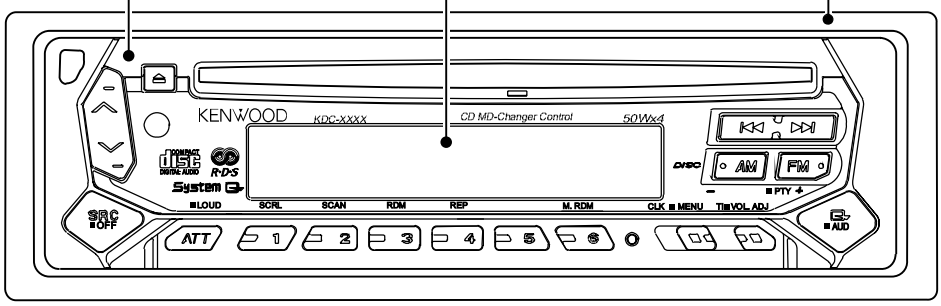
CD mechanism operation description is not in this sarvice manual.
Please, refer to sarvice manual X92-4030-0x (B51-7867-00).

CD mechanism extension cord : WO5-0618-00

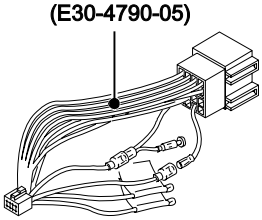
Panel assy
(A64-2872-02): KDC-3023R
(A64-2875-02): KDC-4024/V/Y/YV

Front glass
(B10-4341-01): KDC-3023R
(B10-4344-01): KDC-4024/V/Y/YV

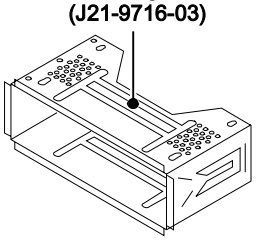
Escutcheon
(B07-3001-02)



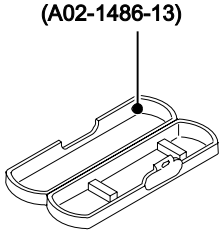
DC cord
(E30-4790-05)



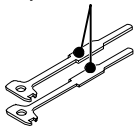
Mounting hardware assy
(J21-9716-03)



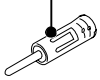
Plastic cabinet assy
(A02-1486-13)



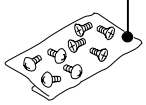
Lever
(D10-4589-04)x2



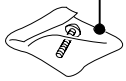
Antenna adaptor
(T90-0523-05)



Screw set※
(N99-1719-05)



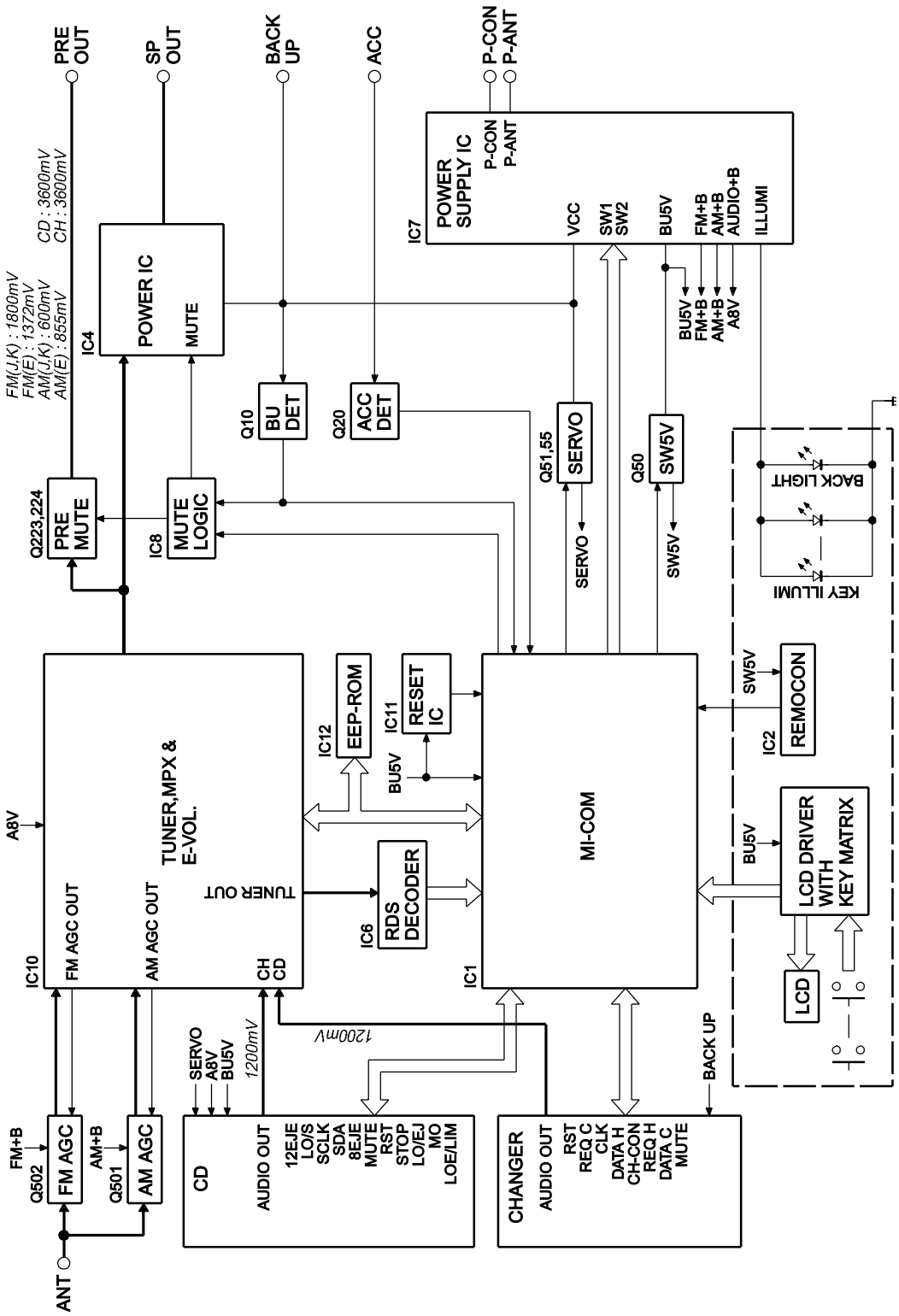
Screw set※
(N99-1610-15)



※ Depends on model. Refer to the parts list

KDC-3023R,4024/V/Y/YV

BLOCK DIAGRAM



COMPONENTS DESCRIPTION

● **SWITCH UNIT (X16-1472-7x)**

Ref.No.	Application/Functions	Operation/Condition/Compatibility
IC1	LCD driver & key matrix	
IC2	Remote Sencer	
Q1	Key scan start	When Q1 base goes Lo, key scan start.
Q2,Q3	Key illumi SW	When Q2 base goes Hi and Q3 base goes Lo, key illumination is Green. When Q2 base goes Lo and Q3 base goes Hi, key illumination is Red.

● **ELECTRIC UNIT (X25-961x-xx)**

Ref.No.	Application/Functions	Operation/Condition/Compatibility
IC1	System control µ-com	System µ-com
IC4	Power amplifire	E-Vol output encoder power amplification for speaker.
IC6	RDS decoder	RDS data decode to tuner receive signals.
IC7	Power supply (Multi AVR)	-
IC8	MUTE Logic	When a pin 1, 2, or 13 is "H", MUTE turns on When a pin 3, 4, or 5 is "H", P-AMP mute turns ON. Changer is RESET when a pin 9, 10, or 11 is "L".
IC10	Tuner & E-Vol.	FM/AM tuner & stereo decoder & E-Vol.
IC11	Power on reset	When B.U. 5V voltage is less than 3.5V, power reset.
IC12	E2P-ROM	Writing and read-out of adjustment data for a tuner
Q10	B.U. detector	BU on (base "H") : Collector "H"
Q20	A.C.C detector	ACC ON (base : "H") : Collector "L"
Q40	MUTE driver	Base "L" : Mute on (collector "L")
Q50	SW 5V	Base "L" : SW5V on
Q51	SERBO AVR control	Pin 2 "H" : Serbo on (pin 4 "H")
Q55	SERBO AVR	Base "H" : Serbo on
Q70	Surge detector	Base "H" : Surge detect
Q101	DSI driver	Base "H" : DSI on
Q102	PANEL 5V SW	Panel attch : PAN5V on
Q201	Noise buffer	Tuner noise input, Emitter output
Q223,224	MUTE	Base "H" : Mute on
Q252	S_METER RC & MPTH TC SW	Base "H" : RC&TC=Long (Base "L" at AF serch)
Q253	S_METER RC & MPTH TC SW	Emitter "H": Collector "H"
Q501	AM RF amplifire	Base "H" : Gain UP
Q502	FM RF amplifire	Gate "H" :Gain UP
Q503	MPX buffer	MPX input buffer with RDS

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MICROCOMPUTER'S TERMINAL DESCRIPTION

● **SYSTEM MICROCOMPUTER uPD780058GC502 (X25 : IC1)**

Pin No.	Name	I/O	Description	Processing Operation
1	TDF DET	I	Panel detection	H:Panel detached L:Panel attached
2	8EJE SW	I		H:Eject is completed Except 8cm CD model:always output L
3	NC	O	Not used (out put L)	
4	Avss			
5	L-RST	O	LCD driver RESET	H:Panel detached L:RESET △3 normal H , Power off L When 7seg model,output L
6	L-CE	O	LCD driver selection	H:Select (panel communication) When panel attached,output L
7	AVREF1			
8	NC		Not used (connected to 9pin)	
9	IC10-DATA	I/O	IC10,E2PROM data communication	△3 non communication : H
10	IC10-CLK	O	IC10,E2PROM clock communication	△3 non communication : H
11	L-DATAL	I	Data input from the LCD driver	Non communication : H When panel detached : L △3 Pull down on X25 unit,Pull up on X16 unit
12	L-DATAS	O	Data output to the LCD driver	When panel detached , output L
13	L-CLK	O	Clock output to the LCD driver	When panel detached , output L
14	R-DATA	I	Data input from the RDS	Except RDS model : output L
15	R-QUAL	I	Quality input from the RDS	Except RDS model : output L
16	CH-DATAC	I	Data input from the changer (new 5L)	Except changer model : output L
17	CH-DATAH	O	Data output to the changer (new 5L)	When non communication ,last data keeping Except changer model : output L
18	CH-CLK	I/O	Clock input/output with the Changer (new 5L)	Check the old and new Except changer model : output L
19	CH-REQH	O	Request output to the changer (new 5L)	L:Requset Except changer model : output L
20	NC	O	Not used (output L)	
21	AFS	O	Noise detection time constant switching terminal	H:Normal L:FM/AM seek and AF search △3 (When tuner SRC auto zero , L)
22-24	NC	O	Not used (output L)	
25	CH-CONT	O	Changer control	H:Changer on L:Changer off Except changer model : output L
26	TYPE REF	O	5V lines output for destination setting	H:During destination reading
27	SD	I	Tuner SD input	H:Station detected
28	NC	O	Not used (output L)	
29	TYPE2	I	Destination type selection terminal 2	Refer to destination type list.
30	TYPE1	I	Destination type selection terminal 1	Refer to destination type list.
31	TYPE0	I	Destination type selection terminal 0	Refer to destination type list.
32	TUNER-TYPE1	I	Destination available/genuine model rool off	H:genuine model 1 L:available model
33	Vss1			
34	TUNER-TYPE0	I	Destination available/genuine model noise cancel	H:genuine model 0 L:available model
35	MUTE	O	Mute (E.Vol,Preset) control	H:mute on L:mute off Power off after that 15 second L
36	M-DATA	I/O	Data input/output with the CD mechanism	△3 non communication : H
37	M-CLK	O	Clock output to the CD mechanism	△3 non communication : H
38	ADJ	O	Tuner lines adjustment	When adjustment = H PS1-0,1=L PS1-2,2-0,1=Hi-z IC10-DATA,CLK=Hi-z
39	P-MUTE	O	Power IC mute control	H:mute off L:mute on Power off after that 15 second H
40	SVR	O	Power IC servo control	H:When momentary power down detected L:Nomal
41	P-STBY	O	Power IC standby control	H:Power IC ON L:Power IC OFF
42	SW5V	O	SW 5V control	H:SW5V OFF L:SW5V ON Power off after that 10 second H

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Name	I/O	Description	Processing Operation
43	B.U-DET	I	Back up detection terminal	H:power down L:B.U. on
44	ACC-DET	I	ACC detection terminal	H:ACC OFF L:ACC ON
45	PS1-0	O	Power supply IC SW1 control 0 Audio 8V,P-CON	BA4911 SW1 / Power supply IC output PS1-2 PS1-1 PS1-0 A8V P-CON P-ANT L L L STANBY L L(H) H(L) ON OFF OFF L H H ON ON OFF H H H ON ON ON
46	PS1-1	O	Power supply IC SW1 control 1 Audio 8V,P-CON	
47	PS1-2	O	Power supply IC SW1 control 2 P-ANT	
48	PS2-0	O	Power supply IC SW2 control 0 ILL,FM,AM	BA4911 SW2 / Power supply IC output PS2-1 PS2-0 ILLUMI FM AM L L STANBY L(H) H(L) ON ON OFF H H ON OFF ON
49	PS2-1	O	Power supply IC SW2 control 1 ILL,FM,AM	
50	BEEP		BEEP	
51	DSI	O	DSI control	H:Light on L:Light off When panel attached,output L When panel detached,flashing at the panel (H/L) FIX model is output L
52	NC	O	Not used (out put L)	
53	NC	O	Not used (out put L)	
54	LOE/LIM SW	I	CD mechanism down&limit detection	H:Chucking detection L:Normal
55	MO SW	O	CD mechanism loading motor control output	H:Loading,Eject,Break L:Play
56	LO/EJ	I/O	CD mechanism loading/Eject switching terminal	H:Eject L:Loading
57	M-STOP	O	Stop output to the CD mechanism	H:Play L:Stop
58	M-RST	O	Reset output to the CD mechanism	H:Normal L:CD mechanism reset
59	M-MUTE	I	Mute input from the CD mechanism	H:mute off L:mute on
60	RESET		Reset input from the System microcomputer	
61	REMO	I	Remote control input	
62	R-CLK	I	RDS clock input	Except RDS model : output L
63	CH-REQC	I	Request input from the changer (new 5L)	H:Changer detection L:Request Except Changer model : output L
64	LOS SW	I	CD mechanism loading's switch detected	H:No disc L:DISK IN(Loading Start)
65	KEY-REQ	I	Key input detected (11pin L connected to the DATA L)	H:Key no input L:Key input (edge key data reading start)
66	12EJE SW	I	12cm disc detected	L:12cm disc
67	Vss0			
68	VDD1			
69	X2		△3 MAIN X'tal oscillating circuit	△3 4.19MHz X'tal connection
70	X1		△3 MAIN X'tal oscillating circuit	△3 4.19MHz X'tal connection
71	IC		TEST	
72	XT2		Not used	OPEN
73	XT1			
74	VDD0		VDD	Connected to VDD
75	AVREF0		A/D converter reference voltage control output, connection to the 80pin AVCONT	
76	S-METER	I	S-meter input	
77	NOISE	I	FM noise detection input	△3
78	PHONE	I	2way mute	2.5V or greater:NAVI MUTE 1.0V or less:TEL MUTE Except phone mute model : output L
79	NC	O	Not used (out put L)	
80	AVCONT	O	A/D converter standard voltage control output	H:During A/D converter active same timing with PON

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MICROCOMPUTER'S TERMINAL DESCRIPTION

● **MECHANISM MICROCOMPUTER MN6627771KP (X32 : IC2)**

Pin No.	Name	I/O	Description	Processing Operation
1	TVD	O	Traverse driver output (PWM output)	
2	SPL	O	Spindle motor drive output (PWM output)	
3	PC	O	Spindle motor ON output	L:ON H:OFF (default)
4	PWM	O	multi-purpose PWM output	It's possible to setup the TOSF2
5	TBAL	O	Tracking balance adjust output (PWM output)	
6	FBAL	O	Focus balance adjust output (PWM output)	
7	NRFDET	I	RF detection signal input	L:detected
8	OFT	I	Off-track signal input	H:detected
9	BDO	I	Drop out signal input	H:detected
10	LDON	O	Laser on signal output H:ON	When command FO on,LDON is H
11	DSLB	O	DSL balance output	
12	DVDD1	-	Power supply for digital circuit	
13	DVSS1	-	Ground lines for digital circuit	
14	AVSS2	-	Ground lines for analog circuit	For DSL,PLL and AD
15	DSLF	I/O	Loop filter terminal for DSL	The bias of ARF output terminal in one
16	ARF	I	RF signal input	
17	RFSW	I	When DSL circuit,constant switch terminal	
18	PLLF	I/O	Loop filter terminal for PLL	
19	PLLF2	I/O	Loop filter characteristic switching terminal for PLL	
20	IREF	I	Standard voltage input terminal	
21	RFENV	I	RF envelope signal input	Analog input
22	TRCRS	I	Track cross signal input	Analog input
23	TE	I	Tracking error signal input	Analog input
24	FE	I	Focusing error signal input	Analog input
25	AVDD2	-	Power supply for analog circuit	For DSL,PLL and AD
26	AVSS1	-	Ground lines for analog circuit	For audio output (Lch and Rch in one)
27	OUTR	O	Rch audio output	
28	AVDD1	-	Power supply for analog circuit	For audio output (Lch and Rch in one)
29	OUTL	O	Lch audio output	
30	DVSS3	-	Ground lines for digital circuit	
31	CSEL	I	Oscillation frequency specification terminal	H:33.8488MHz L:16.9344MHz
32	NC	O	Not used	
33	ASEL	I	Audio output polarity switching terminal	L:Reverse H:Non reverse
34	MSEL0	I	Destination type selection port (set 2bit)	Order "MSEL 0" and "MSEL 1" Set up
35	MSEL1	I	Destination type selection port (set 2bit)	Order "MSEL 0" and "MSEL 1" Set up
36	ICRST	O	Reset control terminal for external DAC	
37	BCLK	O	Bit clock output for serial data	
38	LRCK	O	L/R identification signal output	
39	SRDATA	O	Sirial data output	
40	VREFP	I	A/D converter standard power supply input	
41	HOT	I	Temperature protection detection terminal (AD input)	Over C5(h):on
42	8EJE_SW	I	8cm disc eject stop detection terminal	H:Stop
43	12EJE/SDET_SW	I	Judge the 8cm or 12cm disc	12cm disc stop detection terminal
44	LOE/LIM_SW	I	Pick-up inside detected	Loading end detection terminal
45	PCK	O	PLL extracted clock output,etc	
46	EFM	O	EFM signal output,etc	
47	SENSE	O	Optics servo status signal output,etc	
48	CLVS	O	Spindle servo phase synchronous signal output,etc	L:Normal operation H:Luff servo
49	DEMPH	O	Dephase detection signal output,etc	H:on
50	DVDD2	-	Power supply for digital circuit	
51	X1	I	Main clock input terminal	

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Name	I/O	Description	Processing Operation
52	X2	O	Main clock output terminal	
53	DVSS2	-	Ground lines for digital circuit	
54	XSUB1	I	When external DAC,external clock input terminal	
55	XSUB2	O		
56	TEST1	I	Test port 1	Normal operation is H fixed
57	TEST2	I	Test port 2	Normal operation is H fixed
58	NC	O	Not used	
59	VER/HOR	O	Put length or breadth switching motor terminal	H:Put length L:Put breadth
60	DRV_MUTE	O	Driver mute control terminal	L:MUTE ON H:MUTE OFF
61	/MUTE_L	O	Audio Lch MUTE output	L:MUTE
62	/MUTE_R	O	Audio Rch MUTE output	L:MUTE
63	/RST	I	LSI reset input terminal	H:Normal L:Reset
64	OCD_CLK	I	When OCD connected, clock input	
65	/MSTOP	I	Standby detection terminal	H:Normal L:Mecha stop
66	DATA	I/O	I2C bus data line (communication line with system computer)	At that time serial writer connected
67	SBIO	I	When connected to serial writer,data input terminal	
68	/CLK	I/O	I2C bus clock line (communication line with system computer)	At that time serial writer connected
69	TX	O	Digital audio interface signal output	
70	EQCNT	O	RF EQ switching terminal	L:x2 times H:x1 times
71	XSEL	I	During the external DAC connection	MCLK external input (H:input)
72	MCNT	I	CD mecha Loading/Eject control ON/OFF	L:OFF (HOST control) H:mechanism control
73	P-ON	O	Audio and servo origin power control terminal	L:power on H:power off
74	MOTOR	O	Loading/Eject control switching terminal	At that time LO/EJ is "H"
75	LO/EJ	O	Loading/Eject control terminal or output L	When 72pin (P82) is "L",output "L"
76	CD-RW	O	CD-RW control terminal	H:CD-RW L:normal
77	LDCNT	O	LD control terminal	Operation is same LDON as timing
78	DVDD3	-	Power supply for digital circuit	
79	FOD	O	Focus driver output (PWM output)	
80	TRD	O	Tracking driver output (PWM output)	

System mi-com Destination type list

	TYPE2	TYPE1	TYPE0	MODEL NAME
uPD780058GC499	L	L	L	KDC-2024SA/SYA, 2024SG/SYG
	L	L	H	KDC-2022, 2022V,202MR
	L	H	L	RY-391CD, RX-491CD
	L	H	H	KDC-4023, 2023, 3023
uPD780058GC501	L	L	H	KDC-122, 122S
	L	H	H	KDC-1023, 1023S
	H	L	H	KDC-222, 222S
uPD780058GC502	L	L	L	KDC-3024G/YG, 307G/YG
	L	H	H	KDC-3023R
	H	L	L	KDC-3024A/YA, 307A/YA
	H	L	H	KDC-4024/Y/V/YV
uPD780058GC503	L	L	L	KDC-2094YA/YG
H:	R135	R137	R139	
L:	R136	R138	R140	

KDC-3023R,4024/V/Y/YV

ADJUSTMENT

1. IC10 (TDA7513) -The Tuner adjustment method

- When IC10 and its circumference are fixed, according to the following order, it readjusts if needed.
- The adjustment item changes with parts to exchange. Please refer to "Parts vs Adjustment item table".

1-1. VCO Coil Adjustment -- Adjustment of Tunning Voltage

Voltage Check Point : Vt-Check Land (PWB Side_B, around D506)
Adjustment Coil : L507 (VCO Coil)
The adjustment method : VCO coil is turned and adjusted according to the following tables.

TYPE	Mode	freq.	Voltage	Fig
E/M	AM	1611kHz	5.5 ± 0.1(V)	(C)
K	AM	1700kHz	5.8 ± 0.1(V)	(C)
J	FM	90.0MHz	5.6 ± 0.1(V)	(C)
W(Wide Band)	FM	108.0MHz	7.2 ± 0.1(V)	(C)

M : AM Adjustment
For Your Information : The frequency of SET is only set up by Pre-Set-Key in case this adjustment

1-2. Adjustment of 1st & 2nd-MIX Coil

Voltage Check Point : S_METER-Check Land (PWB Side_B, around W572)
Adjustment Coil : 1stIFT = L508 / 2ndIFT = L509
Setting of Signal Generator : Refer to the following tables

TYPE	MODE	freq.	Mod.	ANT Input	Fig
K	AM	1000kHz	OFF	35dBuEMF	(B),(C)
E,M,J,W	AM	999kHz	OFF	35dBuEMF	(B),(C)

①The appearance and the coil with which S-METER DC voltage serves as the maximum are turned and adjusted in the above-mentioned SG input.
②By the above-mentioned adjustment method, same adjustment is performed to both sides (1st&2nd MIX Coil).

1-3. Adjustment of FM_ANT&RF Coil

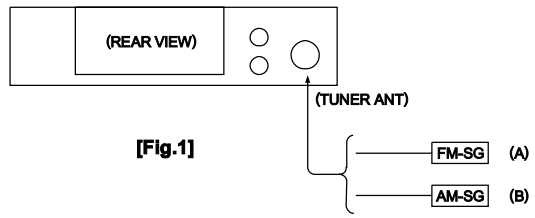
Voltage Check Point : S_METER-Check Land (PWB Side_B, around W572)
Adjustment Coil : ANT_Coil = L505
RF_Coil = L506
Setting of Signal Generator : Refer to the following tables.

TYPE	MODE	freq.	Mod.	ANT Input	Fig
E/M	FM	87.5MHz	OFF	5 or 11dBuEMF	(A),(C)
K	FM	87.9MHz	OFF	5 or 11dBuEMF	(A),(C)
J	FM	76.0MHz	OFF	5 or 11dBuEMF	(A),(C)
W(Wide Band)	FM	65.0MHz	OFF	5 or 11dBuEMF	(A),(C)

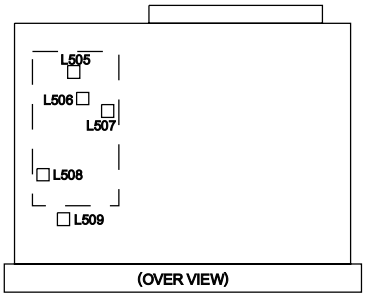
①The appearance and the coil with which S-METER DC voltage serves as the maximum are turned and adjusted in the above-mentioned SG input.
②By the above-mentioned adjustment method, same adjustment is performed to both sides (ANT&RF Coil).

1-4. Adjustment of STEREO (adjustment of 456k-VCO)

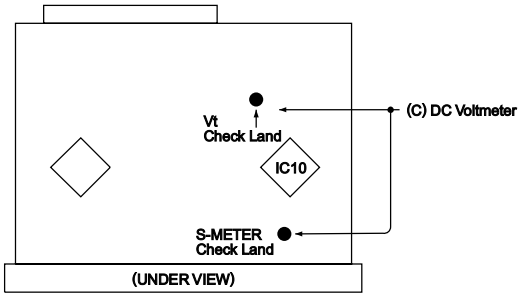
Adjust in TEST_MODE
- How to enter the test mode
  While pressing on [FM] and [PRESET 6] keys, reset the unit.
- Adjustment method
  Complete on condition that show "ALL OFF" when pressing on [PRESET 1] and [PRESET 6] keys.
  (Writing adjustment valve to the EEPROM.)
  Effect of adjustment is in cofirmation of adjustment status at [PRESET 4] key.
- Display of [PRESET 4]
  Adjustment "OK" : 14seg model "E2P OK" 7seg model "EPO"
  Adjustment "NG" : 14seg model "E2P ERR" 7seg model "EPE"
- Releasing the test mode
  Reset mode only.
  ACC off, Power off, Power down and Remove the panel mode is not releasing.



[Fig.1]



[Fig.2]



[Fig.3]

ADJUSTMENT

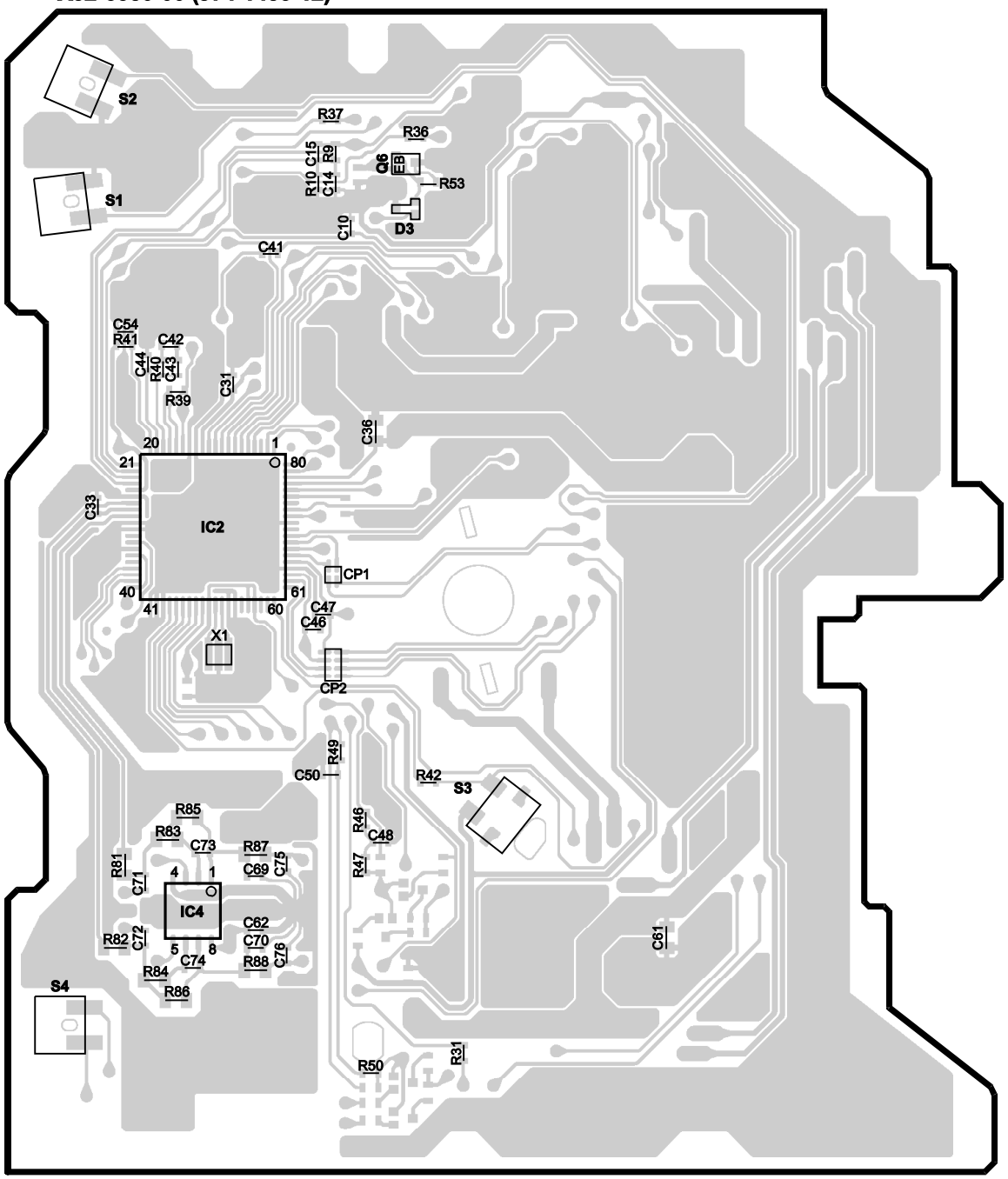
2.IC10 (TDA7513) Replacement-Parts vs Adjustment Item Table

- When the parts in the following tables are exchanged, please readjust according to a table.
- When other parts are exchanged, please perform only a check of operation. There is no necessity for readjustment.

Replacement parts				Adjustment Item					
Parts Name	Ref Number	TYPE	Parts Number	VCOVt	1st MIX	2nd MIX	ANT Coil	RF Coil	Stereo
	IC10	ALL	TDA7513	○	○	○	○	○	○
EEP-ROM	IC12	ALL	M24C01-WMN6T BR24C01AF-W S-24CS02AFJ-TB	○	○	○	○	○	○
Antenna Coil	L505	J E,K,M W(Wide Band)	L31-0966-05 L31-0967-05 L31-0968-05				○		
RF Coil	L506	J E,K,M W(Wide Band)	L31-0969-05 L31-0970-05 L31-0971-05					○	
VCO Coil	L507	J E,K,M W(Wide Band)	L32-0932-05 L32-0933-05 L32-0934-05	○	○	○	○	○	
1st MIX Coil	L508	ALL	L30-0770-05		○				
2nd MIX Coil	L509	ALL	L30-0771-05			○			
Variable Capacitance Diodes	D504	J,E,K,M W(Wide Band)	KV1720S KV1735S	○	○	○	○	○	
Variable Capacitance Diodes	D505	J,E,K,M W(Wide Band)	KV1720S KV1735S	○	○	○	○	○	
Variable Capacitance Diodes	D506	J,E,K,M W(Wide Band)	KV1720S KV1735S	○	○	○	○	○	
X'tal	X501	ALL	L77-2077-05						
				✻ The "○" mark shows that the adjustment is need.					

PC BOARD (COMPONENT SIDE VIEW)

X32-5380-00 (J74-1485-12)



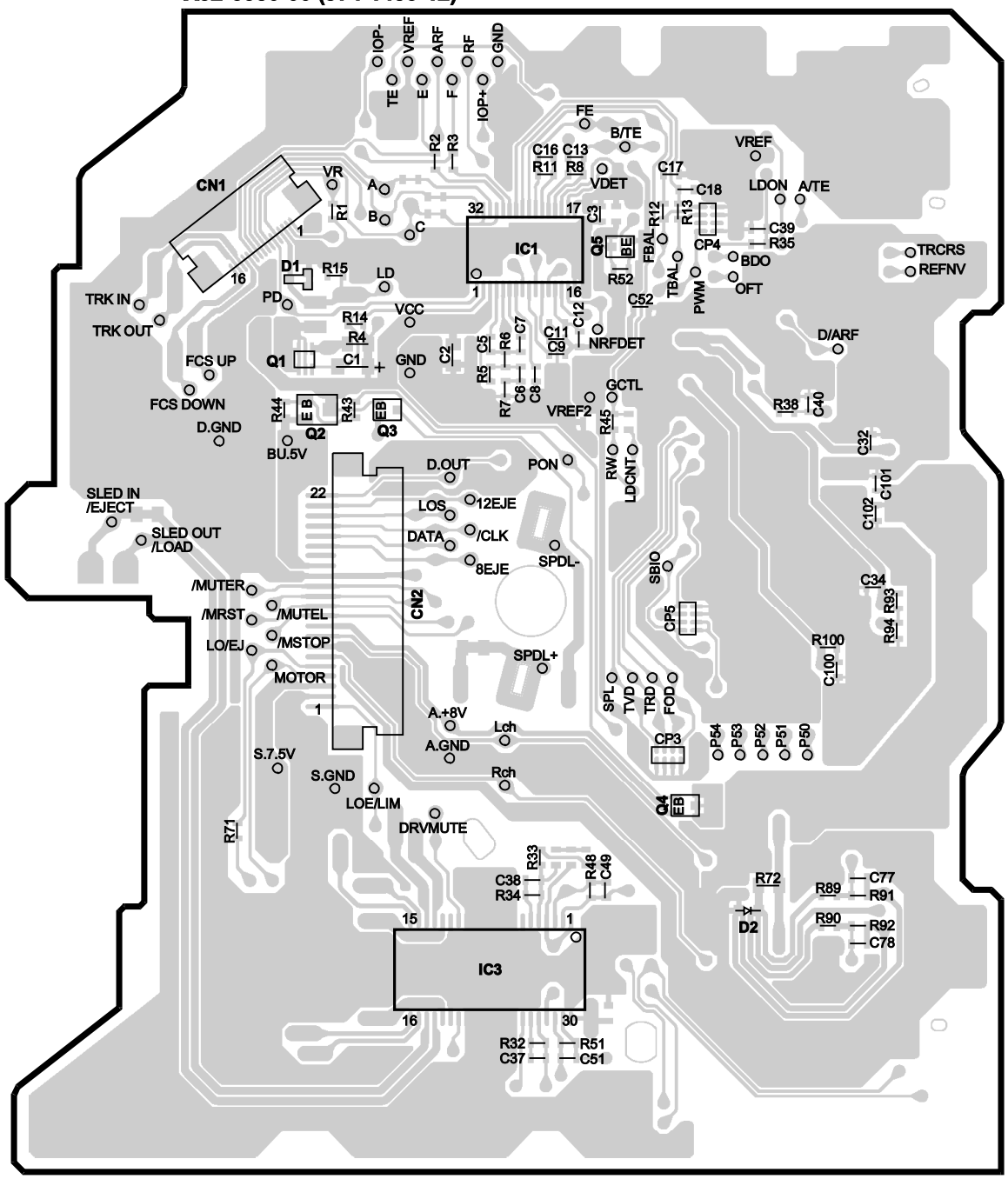
X32-5380-00

Ref. No	address
IC2	3B
IC4	5B
Q6	2C

Refer to the schematic diagram for the values of resistors and capacitors.

PC BOARD (FOIL SIDE VIEW)

X32-5380-00 (J74-1485-12)

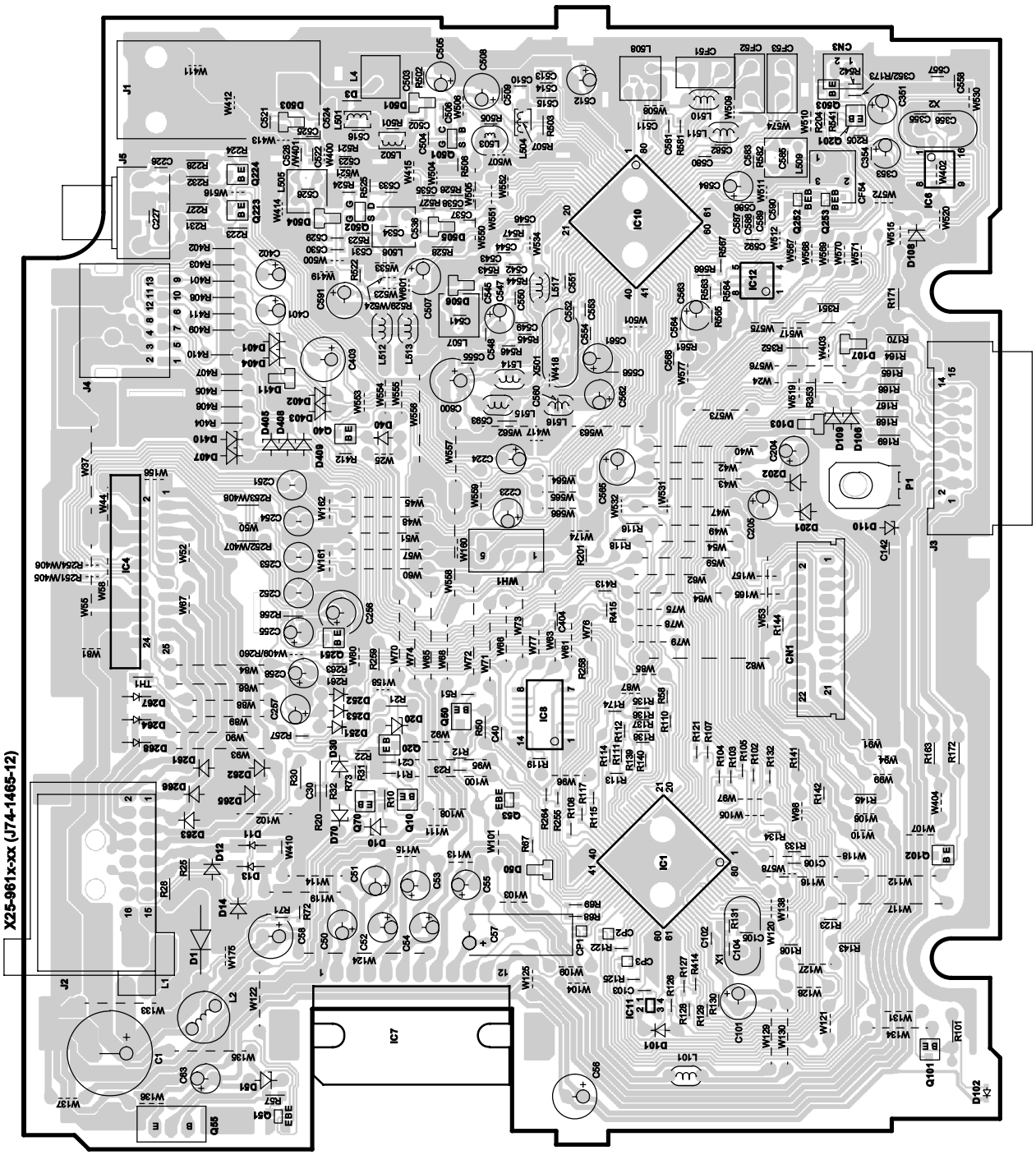


X32-5380-00

Ref. No	address	Ref. No	address	Ref. No	address
IC1	2H	Q2	3G	Q5	2H
IC3	5H	Q3	3G		
Q1	3G	Q4	5I		

Refer to the schematic diagram for the values of resistors and capacitors.

PC BOARD (FOIL SIDE VIEW)



X25-961x-xx

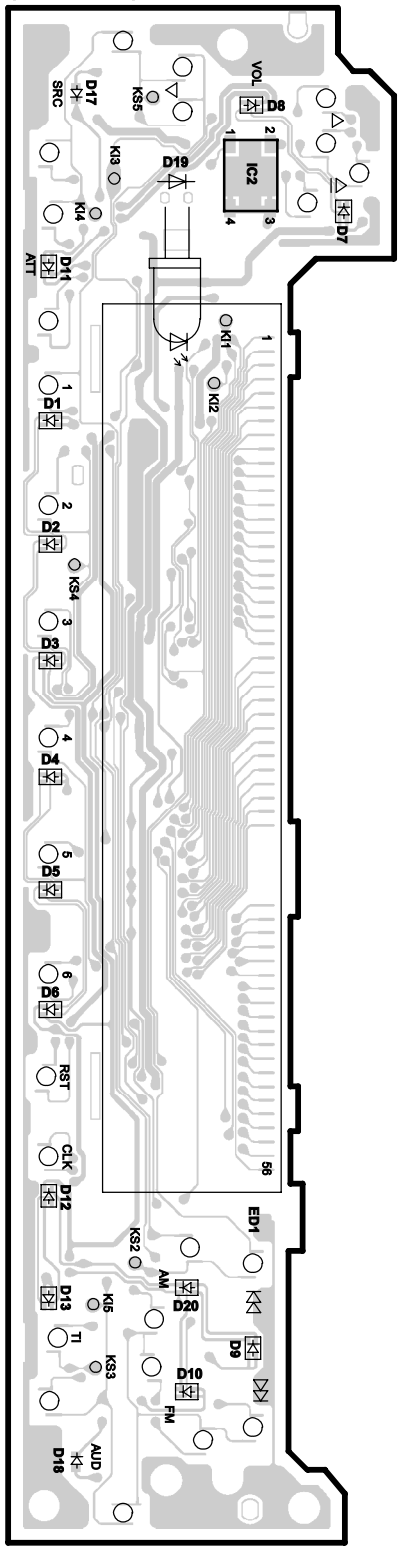
Ref. No	address	Ref. No	address	Ref. No	address	Ref. No	address
IC1	5N	IC12	3N	Q55	6L	Q251	4L
IC4	4K	Q10	5M	Q70	5L	Q252	2N
IC6	2O	Q20	5M	Q101	6O	Q253	2O
IC7	6M	Q40	3L	Q102	5O	Q501	2M
IC8	4M	Q50	4M	Q201	2O	Q502	2L
IC10	2N	Q51	6L	Q223	2L	Q503	2O
IC11	6N	Q53	5M	Q224	2L		

Refer to the schematic diagram for the values of resistors and capacitors.

PC BOARD

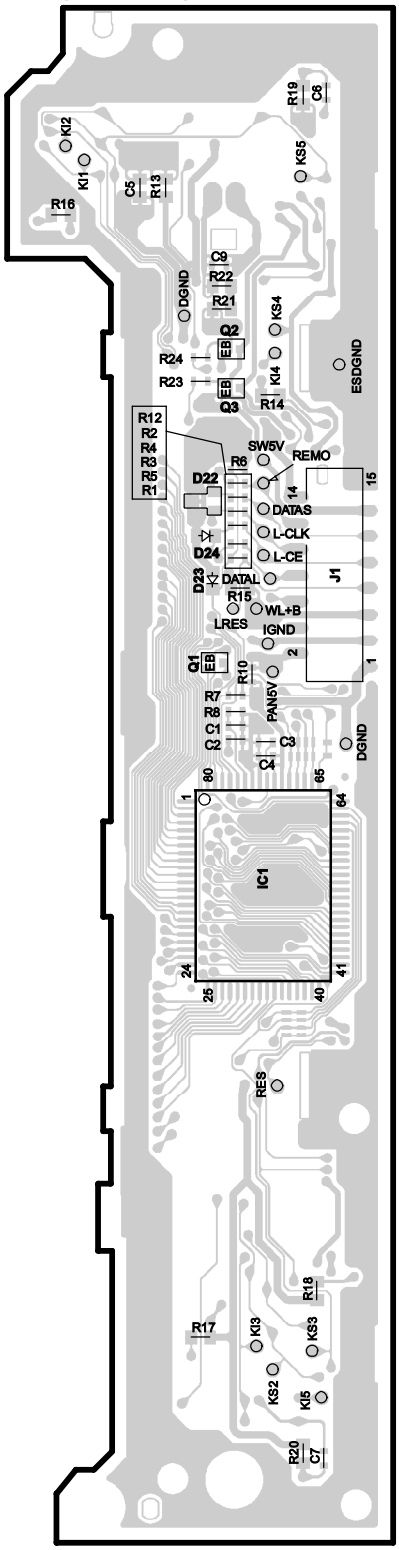
(COMPONENT SIDE VIEW)

X16-1472-7x
(J74-1287-22)



(FOIL SIDE VIEW)

X16-1472-7x
(J74-1287-22)



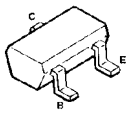
X16-1472-7x

Ref. No	address
IC1	5S
IC2	2Q
Q1	4S

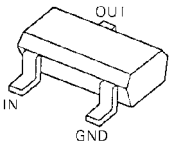
Refer to the schematic diagram for the values of resistors and capacitors.

DTC143TUA
UN5111
2SA1036K
2SA1362
2SA1576A

2SC4081



DTA114EUA
DTA124EUA
DTC124EUA

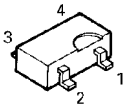


DAN202U

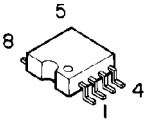
DA204U
DTA114YUA

MA142WK
UN5212

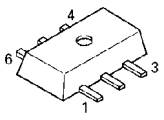
3SK126



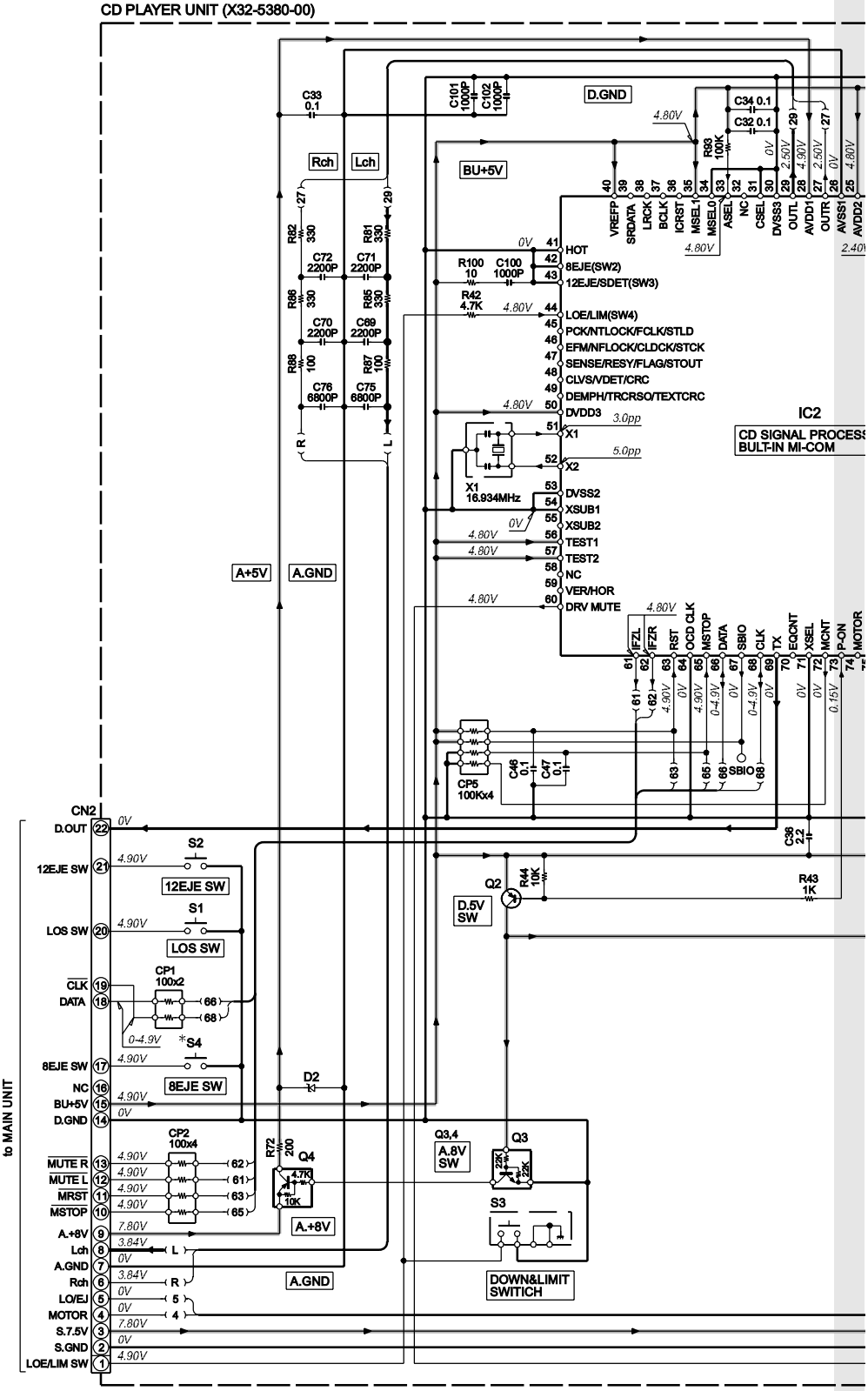
BR24C01AF-W

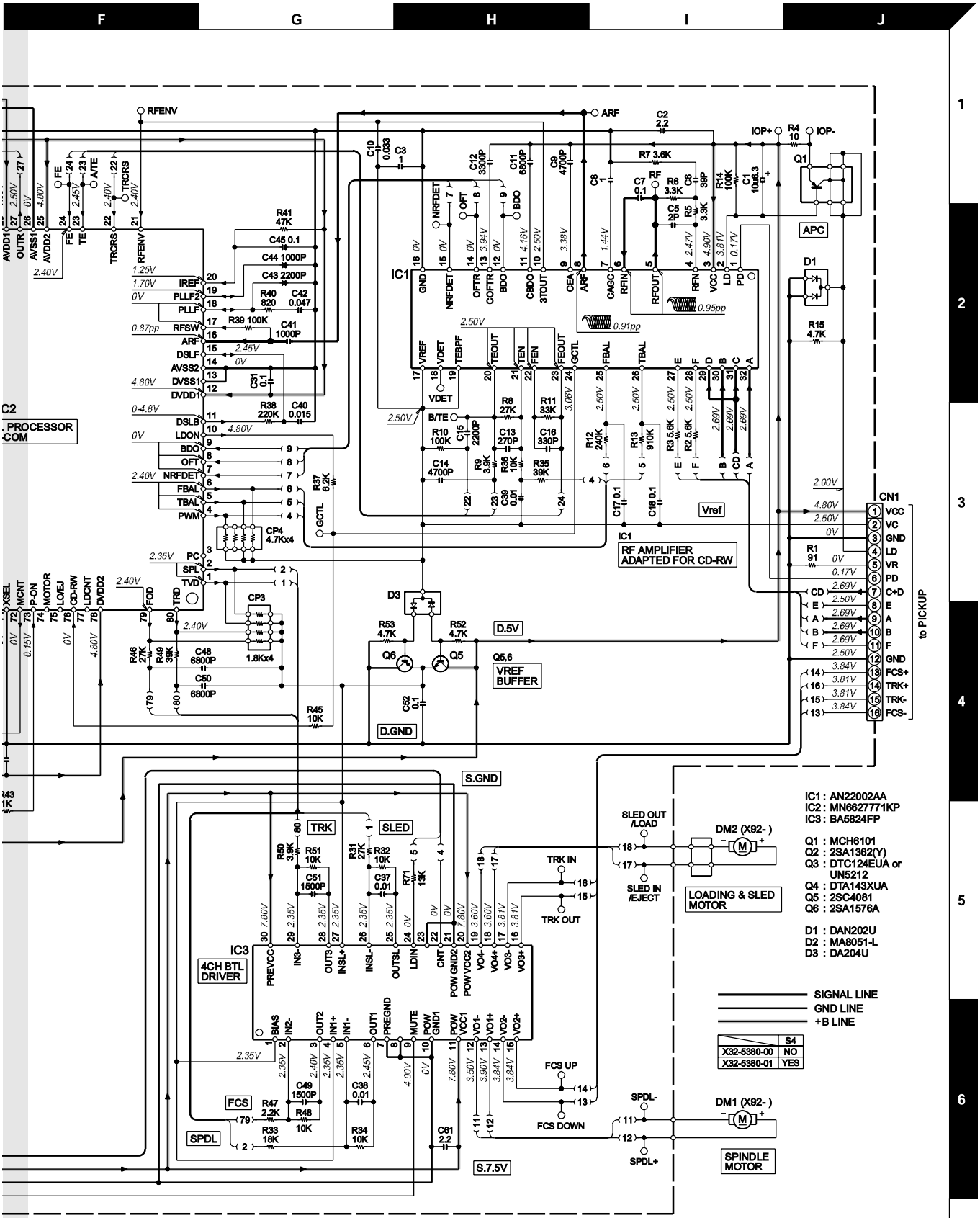


MCH6101

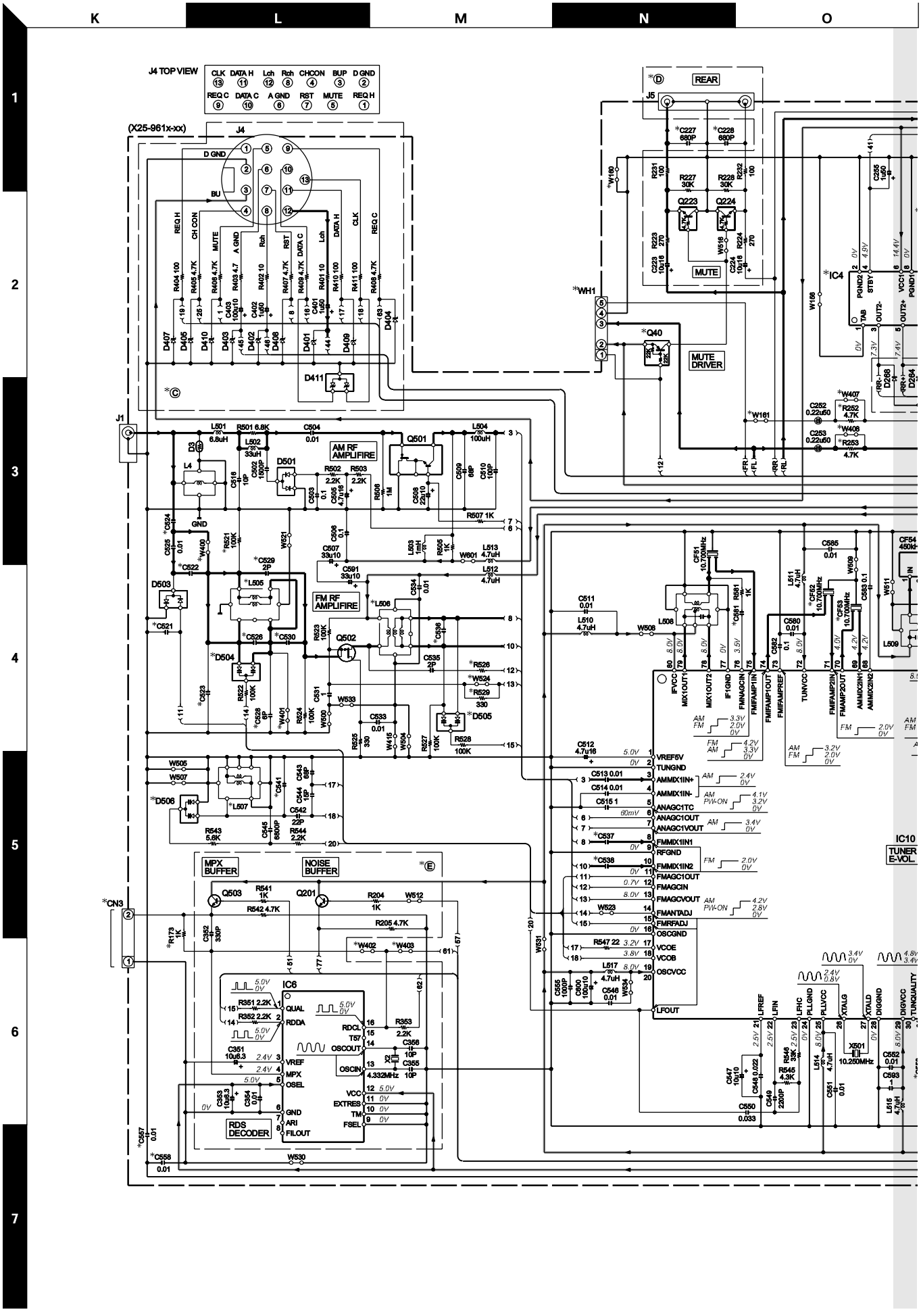


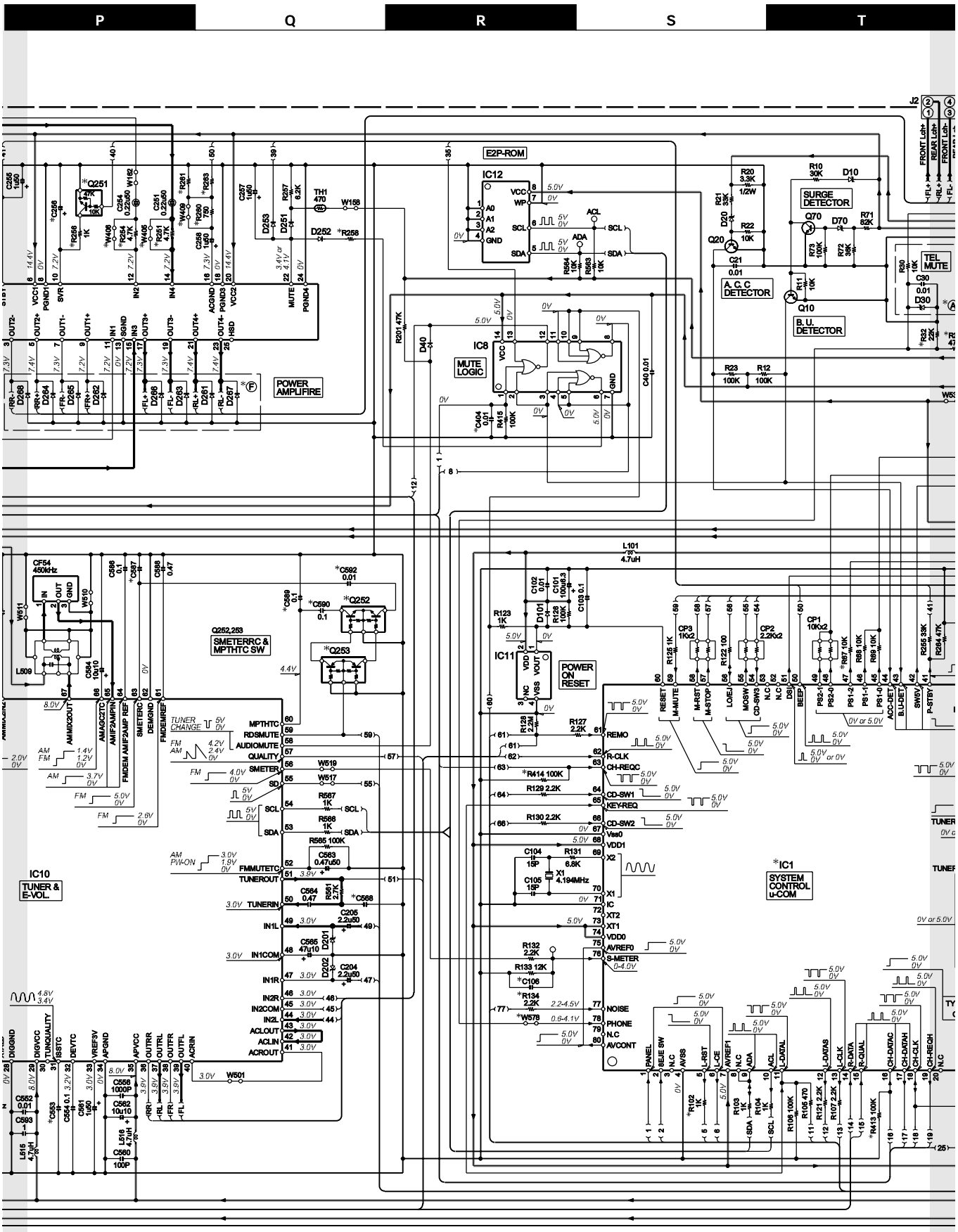
CD PLAYER UNIT (X32-5380-00)

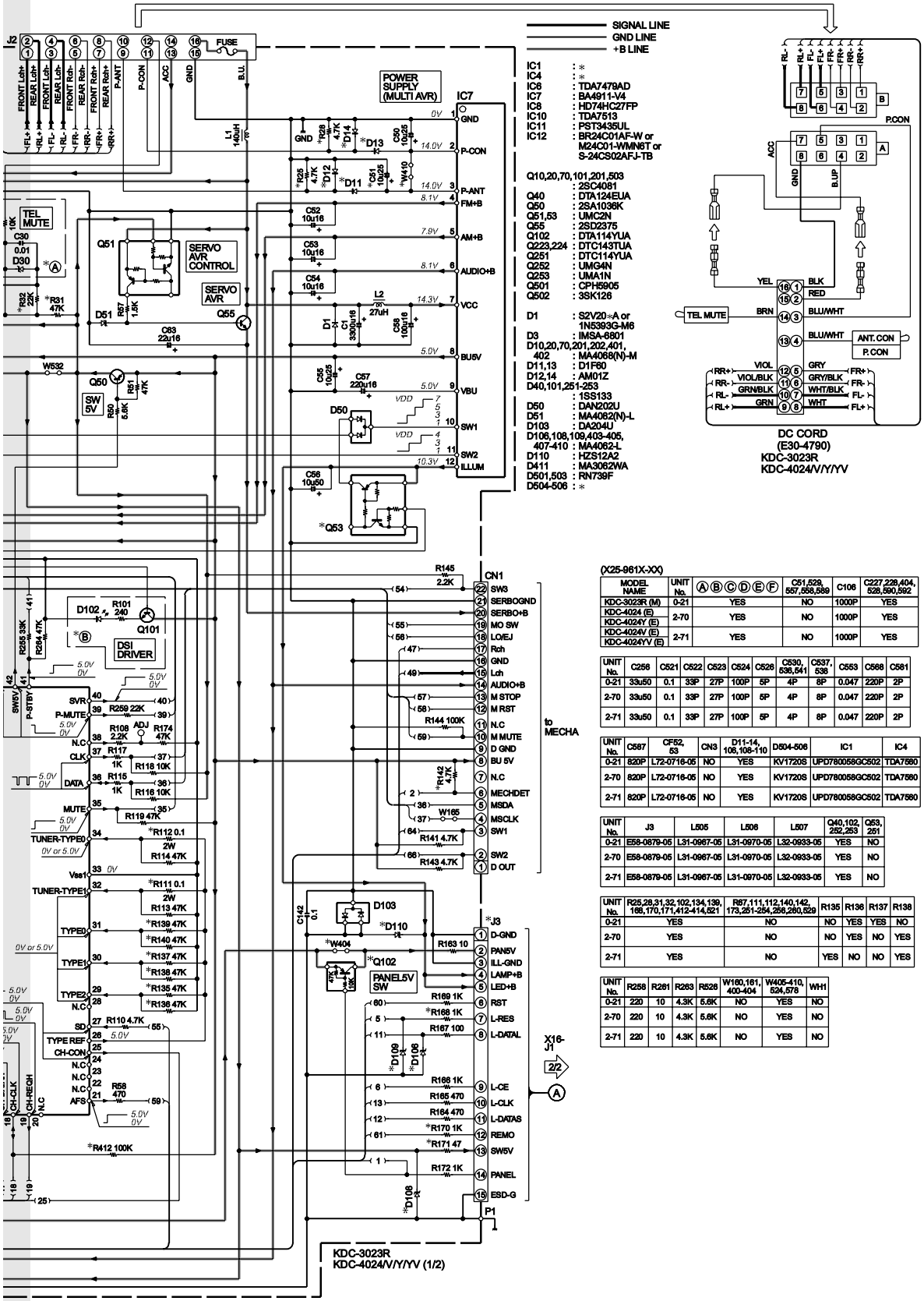




CAUTION : For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).
⚠ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.
• DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.


K
L
M
N
O
1
2
3
4
5
6
7
J4 TOP VIEW
CLK DATA H Lch Rch CHCON BUP D GND
REQ C DATA C A GND RST MUTE REQ H
(X25-961x-xx)
J4
D GND
BU
REQ H
CH CON
MUTE
A GND
Rch
RST
DATA C
Lch
DATA H
CLK
REQ C
REAR
J5
MUTE
MUTE DRIVER
IC4
PGND2
STBY
VCC1
PGND1
TAB
OUT2-
OUT2+
J1
AM RF AMPLIFIRE
FM RF AMPLIFIRE
MPX BUFFER
NOISE BUFFER
RDS DECODER
IC6
QUAL
RDDA
RDCL
TST
OSCOUT
OSCIN
VREF
MPX
OSEL
VCC
EXTRES
TM
GND
ARI
FILOUT
FSEL
4.332MHz
IC10
TUNER E-VOL
VREF5V
TUNGND
AMMIX1IN+
AMMIX1IN-
ANAGC1TC
ANAGC1OUT
ANAGC1VOUT
FMMIX1IN1
RFGND
FMMIX1IN2
FMAGC1OUT
FMAGCIN
FMAGCVOUT
FMANTADJ
FMRFADJ
OSCGND
VCOE
VCOB
OSCVCC
LFOUT
LFREF
LFIN
LFHC
PLLGND
PLLVCC
XTALG
XTALD
DIGGND
DIGVCC
TUNQUALITY
X501
10.250MHz
IFVCC
MIX1OUT1
MIX1OUT2
IF1GND
FMNAGCIN
FMIFAMP1IN
FMIFAMP1OUT
FMIFAMPREF
TUNVCC
FMIFAMP2IN
FMAMP2OUT
AMMIX2IN1
AMMIX2IN2


P
Q
R
S
T
POWER AMPLIFIRE
E2P-ROM
IC12
MUTE LOGIC
IC8
SURGE DETECTOR
A. C. C DETECTOR
B. U. DETECTOR
TEL MUTE
POWER ON RESET
IC11
SMETERRC & MPTHTC SW
IC10
TUNER & E-VOL
IC1
SYSTEM CONTROL u-COM
FRONT Lch+
REAL Lch+
FRONT Lch-



(X25-961X-XX)

MODEL NAME	UNIT No.	Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ Ⓕ	C51,529, 557,558,589	C106	C227,228,404, 528,590,592
KDC-3023R (M)	0-21	YES	NO	1000P	YES
KDC-4024 (E)	2-70	YES	NO	1000P	YES
KDC-4024Y (E)					
KDC-4024V (E)	2-71	YES	NO	1000P	YES
KDC-4024YV (E)					

UNIT No.	C256	C521	C522	C523	C524	C526	C530, 536,541	C537, 538	C553	C568	C581
0-21	33u50	0.1	33P	27P	100P	5P	4P	8P	0.047	220P	2P
2-70	33u50	0.1	33P	27P	100P	5P	4P	8P	0.047	220P	2P
2-71	33u50	0.1	33P	27P	100P	5P	4P	8P	0.047	220P	2P

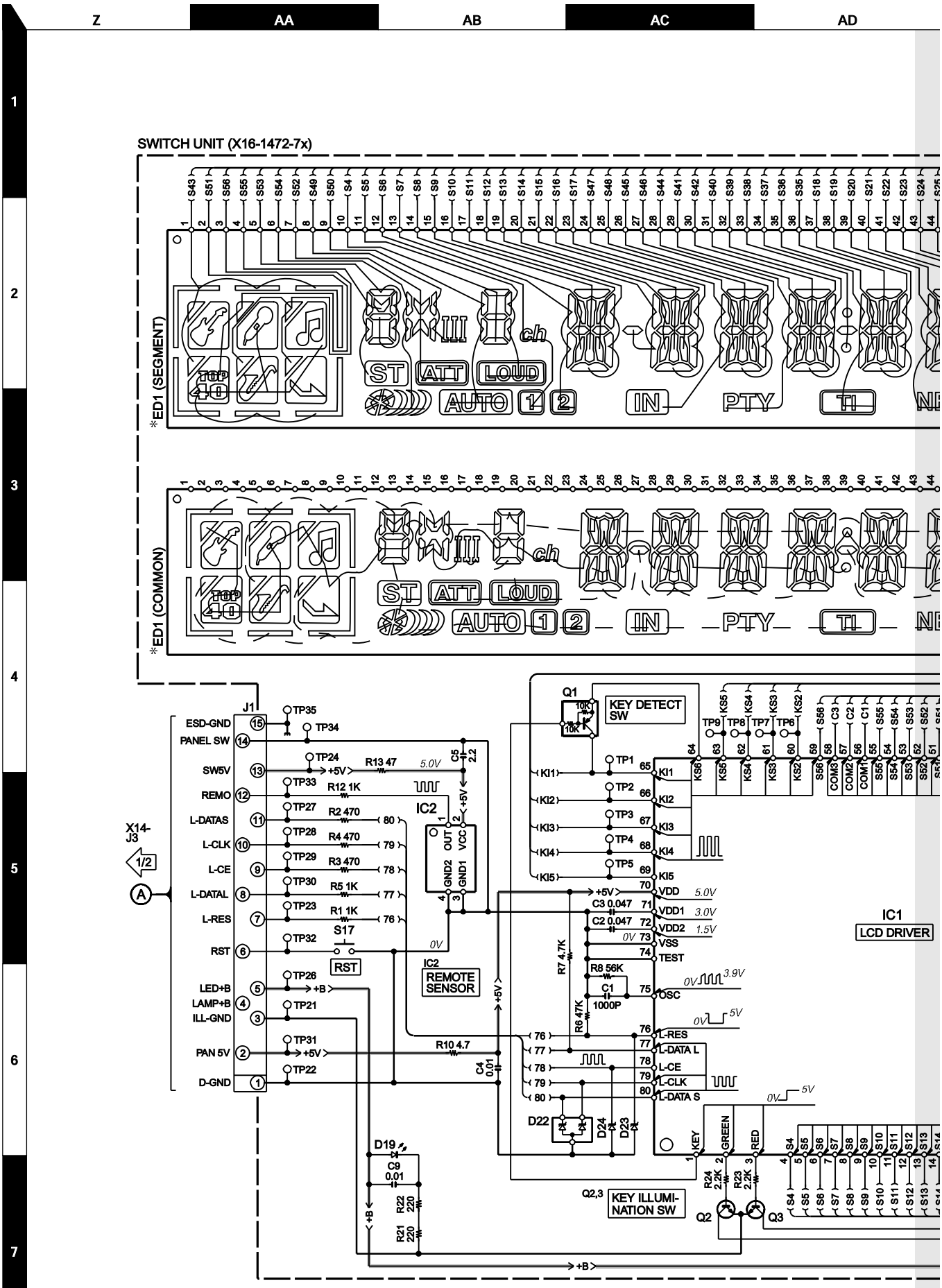
UNIT No.	C587	CF52, 53	CN3	D11-14, 105,106-110	D504-506	IC1	IC4
0-21	820P	L72-0716-05	NO	YES	KV1720S	UPD780058GC502	TDA7560
2-70	820P	L72-0716-05	NO	YES	KV1720S	UPD780058GC502	TDA7560
2-71	820P	L72-0716-05	NO	YES	KV1720S	UPD780058GC502	TDA7560

UNIT No.	J3	L505	L506	L507	Q40,102, 252,253	Q53, 251
0-21	E58-0879-05	L31-0967-05	L31-0970-05	L32-0933-05	YES	NO
2-70	E58-0879-05	L31-0967-05	L31-0970-05	L32-0933-05	YES	NO
2-71	E58-0879-05	L31-0967-05	L31-0970-05	L32-0933-05	YES	NO

UNIT No.	R25,28,31,32,102,134,139, 168,170,171,412-414,521	R67,111,112,140,142, 173,251-254,256,260,529	R135	R136	R137	R138
0-21	YES	NO	NO	YES	YES	NO
2-70	YES	NO	NO	YES	NO	YES
2-71	YES	NO	YES	NO	NO	YES

UNIT No.	R258	R261	R263	R528	W160,161, 400-404	W405-410, 524,578	WH1
0-21	220	10	4.3K	5.6K	NO	YES	NO
2-70	220	10	4.3K	5.6K	NO	YES	NO
2-71	220	10	4.3K	5.6K	NO	YES	NO

CAUTION : For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).
⚠ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.
• DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.


Z
AA
AB
AC
AD
1
2
3
4
5
6
7
SWITCH UNIT (X16-1472-7x)
ED1 (SEGMENT)
ED1 (COMMON)
ST
ATT
LOUD
AUTO
IN
PTY
TI
J1
X14-J3
1/2
ESD-GND
PANEL SW
SW5V
REMO
L-DATAS
L-CLK
L-CE
L-DATAL
L-RES
RST
LED+B
LAMP+B
ILL-GND
PAN 5V
D-GND
S17
IC2
REMOTE SENSOR
IC1
LCD DRIVER
KEY DETECT SW
KEY ILLUMI-NATION SW
Q1
Q2
Q3
Q2,3
D19
D22
D23
D24
KEY
GREEN
RED
+B
+5V
5.0V
3.9V
3.0V
1.5V
0V
5V

CAUTION : For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).
⚠ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.
• DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

IC1 : LC75883E
IC2 : RS-171

Q1 : DTA114EUA
Q2,3 : 2SC4081

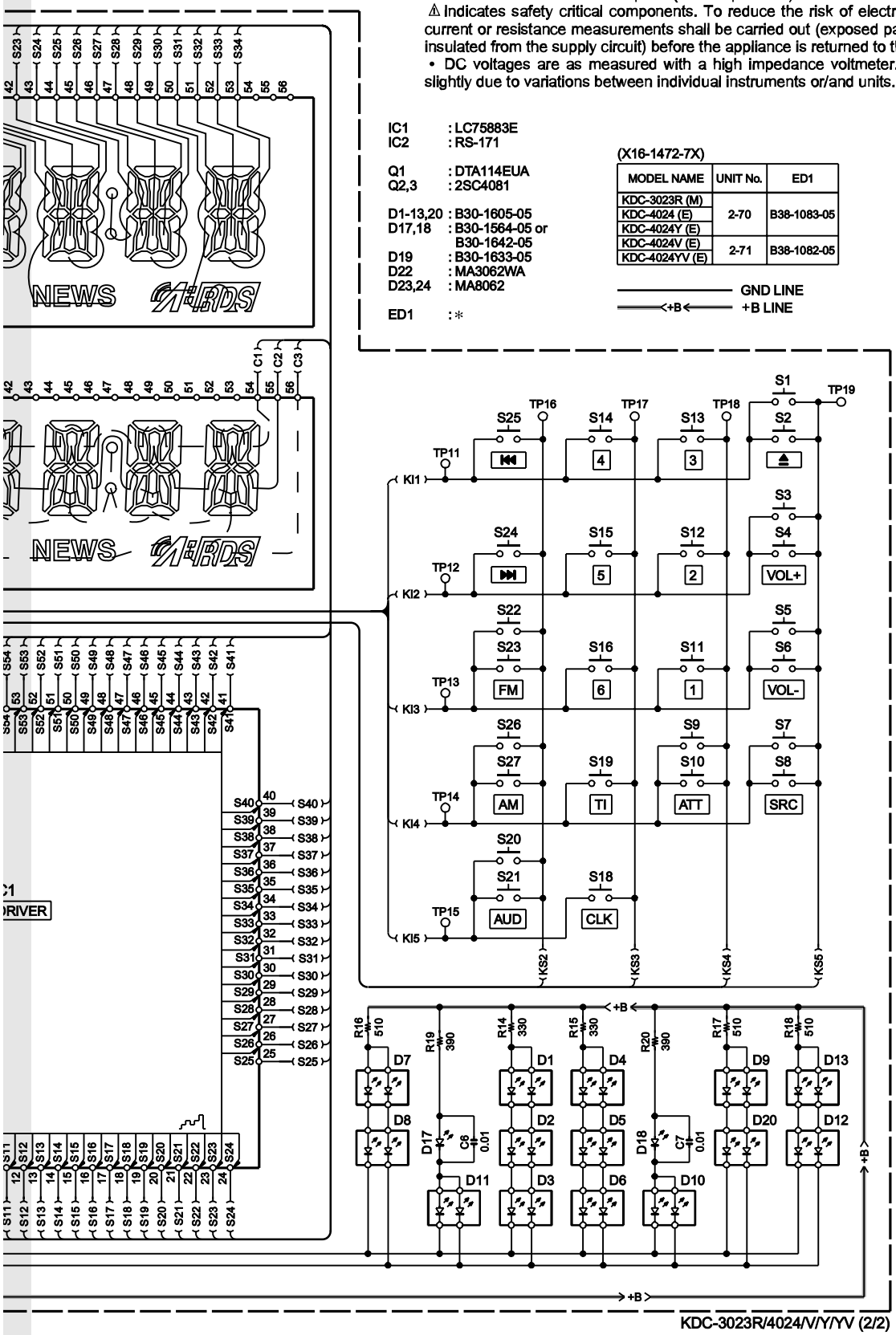
D1-13,20 : B30-1605-05
D17,18 : B30-1564-05 or B30-1642-05
D19 : B30-1633-05
D22 : MA3062WA
D23,24 : MA8062

ED1 : *

(X16-1472-7X)

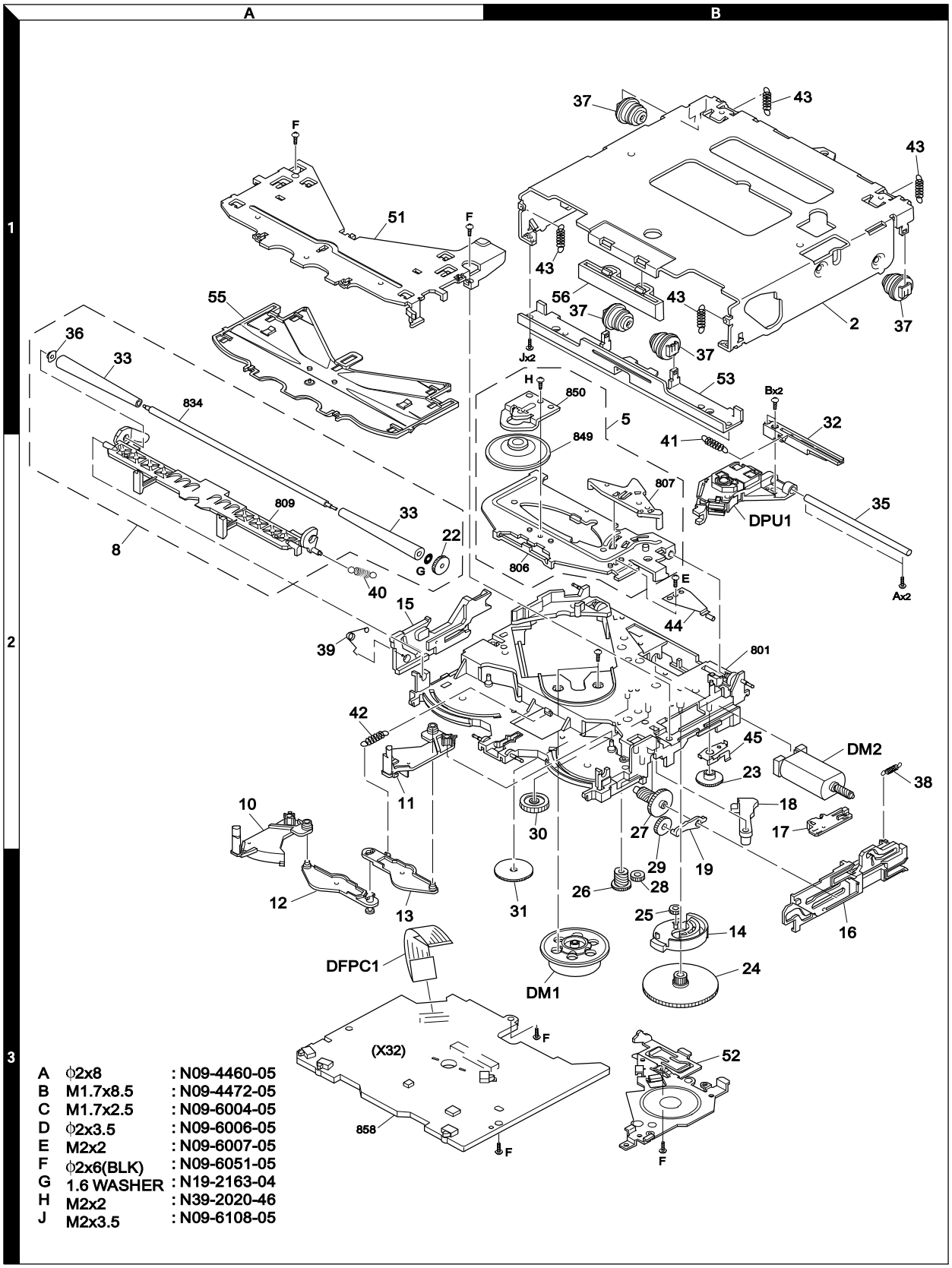
MODEL NAME	UNIT No.	ED1
KDC-3023R (M)	2-70	B38-1083-05
KDC-4024 (E)		
KDC-4024Y (E)		
KDC-4024V (E)	2-71	B38-1082-05
KDC-4024YV (E)		

GND LINE
+B LINE



KDC-3023R/4024/V/Y/YV (2/2)

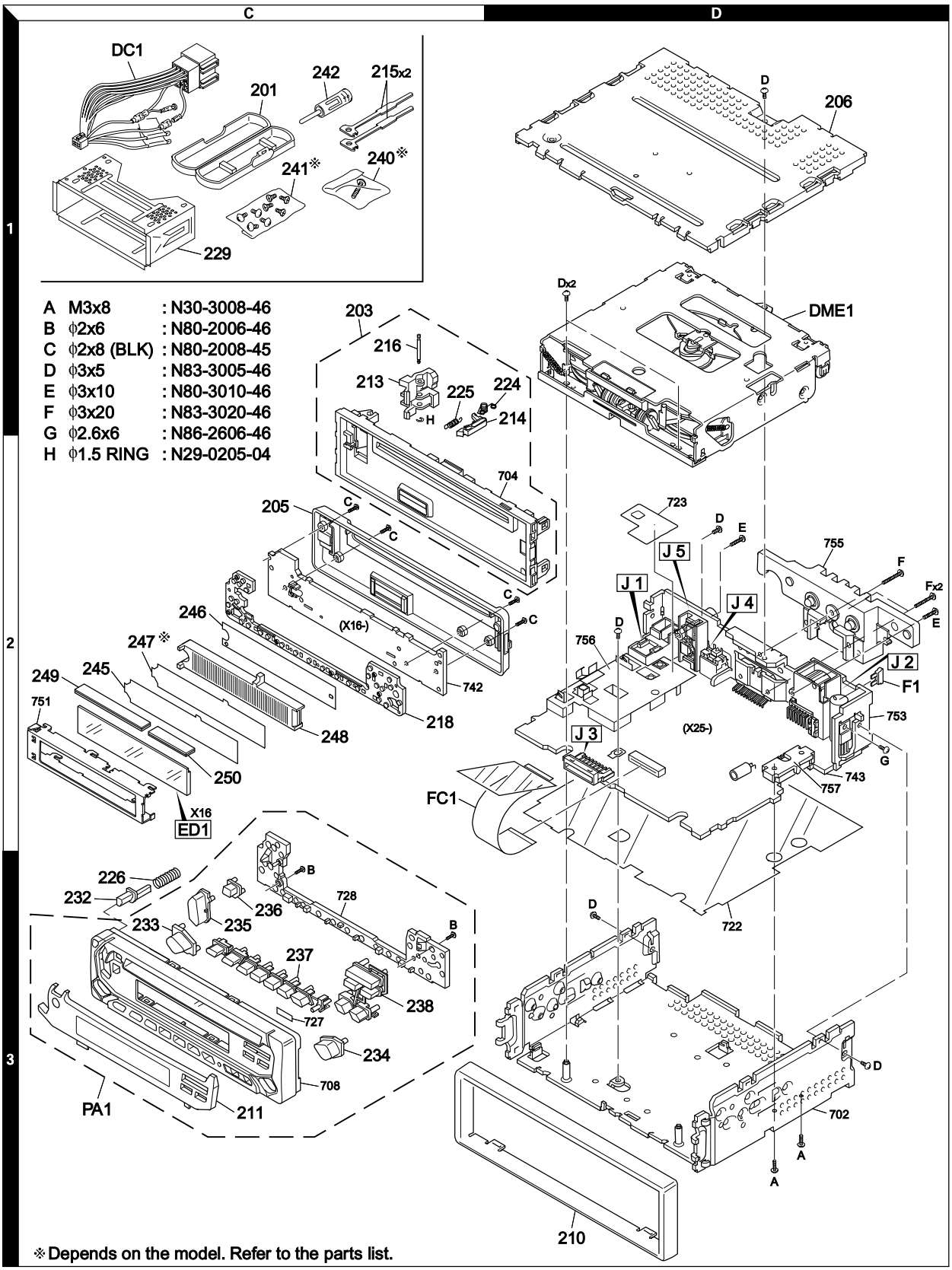
EXPLODED VIEW (MECHANISM)



Parts with the exploded numbers larger than 700 are not supplied.

KDC-3023R,4024/V/Y/YV

EXPLODED VIEW (UNIT)



Parts with the exploded numbers larger than 700 are not supplied.

KDC-3023R,4024/V/Y/YV

PARTS LIST

＊New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

Ref. No.	Add	New	Parts No.	Description	Destination
KDC-3023R,4024/V/Y/YV					
201	1C		A02-1486-13	PLASTIC CABINET ASSY	
203	1C		A22-2863-03	SUB PANEL ASSY	
205	2C		A46-1750-01	REAR COVER	
206	1D		A52-0804-02	TOP PLATE	
PA1	3C	＊	A64-2872-02	PANEL ASSY	M2
PA1	3C	＊	A64-2875-02	PANEL ASSY	EE1ZZ1
-			B46-0100-50	WARRANTY CARD	M2EE1
-			B46-0182-14	ID CARD	EE1
-			B46-0606-04	ID CARD	M2ZZ1
-			B58-1365-04	CAUTION CARD	
-		＊	B64-2478-00	INSTRUCTION MANUAL(ENG.T-CHI)	M2
-		＊	B64-2479-00	INSTRUCTION MANUAL(ARABIC)	M2
-		＊	B64-2484-00	INSTRUCTION MANUAL(ENGLISH)	EE1
-		＊	B64-2485-00	INSTRUCTI.MANUAL(FRE.GER.ITA.)	EE1
-		＊	B64-2486-00	INSTRUCTI.MANUAL(DUT.SPA.POR.)	EE1
-		＊	B64-2487-00	INSTRUCTI.MANUAL(ENG.RUS.POL.)	ZZ1
-		＊	B64-2488-00	INSTRUCTION MANUAL(SWE.FIN.)	ZZ1
-		＊	B64-2489-00	INSTRUCTI.MANUAL(CZE.HUN.CRO.)	ZZ1
210	3D		B07-3001-02	ESCUTCHEON	
211	3C	＊	B10-4341-01	FRONT GLASS	M2
211	3C	＊	B10-4344-01	FRONT GLASS	EE1ZZ1
213	1C		D10-4446-03	LEVER	
214	2C		D10-4447-03	LEVER	
215	1C		D10-4589-04	LEVER	
216	1C		D21-2329-04	SHAFT	
218	2C		E29-1872-02	CONDUCTIVE RUBBER	
⚠ DC1	1C		E30-4790-05	DC CORD	
⚠ DC1	1C		E30-6134-05	DC CORD	
FC1	2D		E39-0476-05	FLAT CABLE	
⚠ F1	2D		F52-0006-05	FUSE(MINI BLADE TYPE)	
224	1C		G01-2987-04	TORSION COIL SPRING	
225	1C		G01-3096-04	EXTENSION SPRING	
226	3C		G01-3149-04	COMPRESSION SPRING	
-		＊	H10-4856-02	POLYSTYRENE FOAMED FIXTURE	
-			H25-0329-04	PROTECTION BAG (280X450X0.03)	
-			H25-0337-04	PROTECTION BAG (180X300X0.03)	
-		＊	H54-2740-03	ITEM CARTON CASE	M2
-		＊	H54-2746-03	ITEM CARTON CASE	E
-		＊	H54-2747-03	ITEM CARTON CASE	E1
-		＊	H54-2750-03	ITEM CARTON CASE	Z
-		＊	H54-2751-03	ITEM CARTON CASE	Z1
229	1C		J21-9716-03	MOUNTING HARDWARE ASSY	
232	3C		K24-3822-04	KNOB (RELEASE)	
233	3C		K24-3823-04	KNOB (SRC)	
234	3C		K24-3824-04	KNOB (AUD)	
235	3C		K24-3825-03	KNOB (VOL)	
236	3C		K24-3826-04	KNOB (EJECT)	
237	3C		K25-1396-03	KNOB (PRE1-6,ATT,RESET)	
238	3C		K25-1397-03	KNOB (AUTO,CLK,FM,AM)	

Ref. No.	Add	New	Parts No.	Description	Destination
240	1C		N99-1610-15	SCREW SET	M2
241	1C		N99-1719-05	SCREW SET	M2
A	3D		N30-3008-46	PAN HEAD MACHINE SCREW	
B	3C		N80-2006-46	PAN HEAD TAPTITE SCREW	
C	2C		N80-2008-45	PAN HEAD TAPTITE SCREW	
D	1D		N83-3005-46	PAN HEAD TAPTITE SCREW	
H	1C		N29-0205-04	RETAINING RING (1.5)	
242	1C		T90-0523-05	ANTENNA ADAPTOR	
242	1C		T90-0534-05	ANTENNA ADAPTOR	
DME1	1D	＊	X92-4640-00	MECHANISM ASSY	
SWITCH UNIT (X16-1472-7x)					
245	2C		B11-1358-04	OPTICAL DIFFUSER	M2EZ
245	2C		B11-1372-04	OPTICAL DIFFUSER	E1Z1
246	2C		B11-1359-04	REFLECTION SHEET	
247	2C		B11-1361-04	COLOR FILTER	E1Z1
248	2C		B19-2130-03	LIGHTING BOARD	
D1 -13			B30-1605-05	LED(2COLOR PG/RED)	
D17 , 18			B30-1564-05	LED(1608,BLUE)	
D17 , 18			B30-1642-05	LED	
D19			B30-1633-05	LED(WHITE)	
D20			B30-1605-05	LED(2COLOR PG/RED)	
ED1			B38-1082-05	LIQUID CRYSTAL	E1Z1
ED1			B38-1083-05	LIQUID CRYSTAL	M2EZ
C1			CK73GB1H102K	CHIP C 1000PF K	
C2 , 3			CK73GB1E473K	CHIP C 0.047UF K	
C2 , 3			CK73GB1H473K	CHIP C 0.047UF K	
C4			CK73GB1H103K	CHIP C 0.010UF K	
C5			CK73FB1A225K	CHIP C 2.2UF K	
C6 , 7			CK73GB1H103K	CHIP C 0.010UF K	
C9			CK73GB1H103K	CHIP C 0.010UF K	
249	2C		E29-1887-04	CONDUCTIVE RUBBER	
250	2C		E29-1888-04	CONDUCTIVE RUBBER	
J1			E59-0828-05	RECTANGULAR PLUG	
-			J19-5130-04	HOLDER	
R1			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R2 -4			RK73GB2A471J	CHIP R 470 J 1/10W	
R5			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R6			RK73GB2A473J	CHIP R 47K J 1/10W	
R7			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R8			RK73GB2A563J	CHIP R 56K J 1/10W	
R10			RK73GB2A4R7J	CHIP R 4.7 J 1/10W	
R12			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R13			RK73FB2B470J	CHIP R 47 J 1/8W	
R14 , 15			RK73FB2B331J	CHIP R 330 J 1/8W	
R16 -18			RK73FB2B511J	CHIP R 510 J 1/8W	
R19 , 20			RK73FB2B391J	CHIP R 390 J 1/8W	
R21 , 22			RK73FB2B221J	CHIP R 220 J 1/8W	
R23 , 24			RK73GB2A222J	CHIP R 2.2K J 1/10W	
D22			MA3062WA	ZENER DIODE	
D23 , 24			MA8062	ZENER DIODE	
IC1			LC75883E	MOS-IC	

E : KDC-4024 **Z** : KDC-4024Y **M2** : KDC-3023R
E1 : KDC-4024V **Z1** : KDC-4024YV

⚠ indicates safety critical components.

KDC-3023R,4024/V/Y/YV

PARTS LIST

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Ref. No.	Add	New	Parts No.	Description	Destination
IC2			RS-171	ANALOGUE IC	
Q1			DTA114EUA	DIGITAL TRANSISTOR	
Q1			UN5111	DIGITAL TRANSISTOR	
Q2 , 3			2SC4081	TRANSISTOR	
ELECTRIC UNIT (X25-961x-xx)					
D102			B30-1567-05	LED(1608,RED)	
C1			C90-5242-05	ELECTRO 3300UF 16WV	
C21			CK73GB1H103K	CHIP C 0.010UF K	
C30			CK73GB1H103K	CHIP C 0.010UF K	
C40			CK73GB1H103K	CHIP C 0.010UF K	
C50			CE04NW1E100M	ELECTRO 10UF 25WV	
C52 -54			CE04NW1C100M	ELECTRO 10UF 16WV	
C55			CE04NW1E100M	ELECTRO 10UF 25WV	
C56			CE04CW1H100M	ELECTRO 10UF 50WV	
C57			C90-2980-05	ELECTRO 220UF 16WV	
C58			C90-2962-05	ELECTRO 100UF 16WV	
C63			CE04NW1C220M	ELECTRO 22UF 16WV	
C101			CE04NW0J101M	ELECTRO 100UF 6.3WV	
C102			CK73GB1H103K	CHIP C 0.010UF K	
C103			CK73GB1C104K	CHIP C 0.10UF K	
C104 , 105			CC73GCH1H150J	CHIP C 15PF J	
C106			CK73GB1H102K	CHIP C 1000PF K	
C142			CK73GB1C104K	CHIP C 0.10UF K	
C204 , 205			CE04NW1H2R2M	ELECTRO 2.2UF 50WV	
C223 , 224			CE04NW1C100M	ELECTRO 10UF 16WV	
C251-254			C90-5296-05	NP-ELECT 0.22UF 50WV	
C255			CE04NW1H010M	ELECTRO 1.0UF 50WV	
C256			CE04NW1A330M	ELECTRO 33UF 10WV	
C257			CE04NW1H010M	ELECTRO 1.0UF 50WV	
C258			C90-2935-05	ELECTRO 1.0UF 50WV	
C351			C90-2592-05	ELECTRO 10UF 6.3WV	
C352			CC73GCH1H331J	CHIP C 330PF J	
C353			C90-2592-05	ELECTRO 10UF 6.3WV	
C354			CK73GB1H103K	CHIP C 0.010UF K	
C355 , 356			CC73GCH1H100D	CHIP C 10PF D	
C401 , 402			C90-2608-05	ELECTRO 1.0UF 50WV	
C403			CE04CW1A101M	ELECTRO 100UF 10WV	
C404			CK73GB1H103K	CHIP C 0.010UF K	
C502			CK73GB1H152K	CHIP C 1500PF K	
C503			CK73GB1C104K	CHIP C 0.10UF K	
C504			CK73GB1H103K	CHIP C 0.010UF K	
C505			C90-2595-05	ELECTRO 4.7UF 16WV	
C506			CK73GB1C104K	CHIP C 0.10UF K	
C507			CE04CW1A330M	ELECTRO 33UF 10WV	
C508			CE04CW1A220M	ELECTRO 22UF 10WV	
C509			CC73GCH1H680J	CHIP C 68PF J	
C510			CC73GCH1H101J	CHIP C 100PF J	
C511			CK73GB1H103K	CHIP C 0.010UF K	
C512			C90-2595-05	ELECTRO 4.7UF 16WV	
C513 , 514			CK73GB1H103K	CHIP C 0.010UF K	
C515			CK73FB1C105K	CHIP C 1.0UF K	
C516			CC73GCH1H100D	CHIP C 10PF D	
C521			CK73GB1C104K	CHIP C 0.10UF K	
C522			CC73GCH1H330J	CHIP C 33PF J	

SWITCH UNIT (X16-1472-7x)

Ref. No.	Add	New	Parts No.	Description	Destination
C523			CC73GCH1H270J	CHIP C 27PF J	
C524			CC73GCH1H101J	CHIP C 100PF J	
C525			CK73GB1H103K	CHIP C 0.010UF K	
C526			CC73GCH1H050C	CHIP C 5.0PF C	
C528			CC73GCH1H060D	CHIP C 6.0PF D	
C530			CC73GCH1H040C	CHIP C 4.0PF C	
C531			CK73FB1C105K	CHIP C 1.0UF K	
C533 , 534			CK73GB1H103K	CHIP C 0.010UF K	
C535			CC73GCH1H020C	CHIP C 2.0PF C	
C536			CC73GCH1H040C	CHIP C 4.0PF C	
C537 , 538			CC73GCH1H080D	CHIP C 8.0PF D	
C541			CC73GCH1H040C	CHIP C 4.0PF C	
C542			CC73GCH1H220J	CHIP C 22PF J	
C543			CC73GCH1H680J	CHIP C 68PF J	
C544			CC73GCH1H150J	CHIP C 15PF J	
C545			CK73GB1H682K	CHIP C 6800PF K	
C546			CK73GB1H103K	CHIP C 0.010UF K	
C547			C90-2594-05	ELECTRO 10UF 10WV	
C548			CK73GB1E223K	CHIP C 0.022UF K	
C549			CK73GB1H222K	CHIP C 2200PF K	
C550			CK73GB1E333K	CHIP C 0.033UF K	
C551 , 552			CK73GB1H103K	CHIP C 0.010UF K	
C553 , 554			CK73GB1C104K	CHIP C 0.10UF K	
C555 , 556			CK73GB1H102K	CHIP C 1000PF K	
C560			CC73GCH1H101J	CHIP C 100PF J	
C561			C90-2608-05	ELECTRO 1.0UF 50WV	
C562			C90-2594-05	ELECTRO 10UF 10WV	
C563			C90-2606-05	ELECTRO 0.47UF 50WV	
C564			CK73GB1A474K	CHIP C 0.47UF K	
C565			CE04NW1A470M	ELECTRO 47UF 10WV	
C568			CC73GCH1H221J	CHIP C 220PF J	
C580			CK73GB1H103K	CHIP C 0.010UF K	
C581			CC73GCH1H020C	CHIP C 2.0PF C	
C582 , 583			CK73GB1C104K	CHIP C 0.10UF K	
C584			C90-2594-05	ELECTRO 10UF 10WV	
C585			CK73GB1H103K	CHIP C 0.010UF K	
C586			CK73GB1C104K	CHIP C 0.10UF K	
C587			CK73GB1H821K	CHIP C 820PF K	
C588			CK73GB1A474K	CHIP C 0.47UF K	
C590			CK73GB1C104K	CHIP C 0.10UF K	
C591			CE04CW1A330M	ELECTRO 33UF 10WV	
C592			CK73GB1H103K	CHIP C 0.010UF K	
C593			CK73FB1C105K	CHIP C 1.0UF K	
C600			CE04CW1A101M	ELECTRO 100UF 10WV	
CN1			E40-9550-05	FLAT CABLE CONNECTOR	
J1			E04-0312-05	RF COAXIAL CABLE RECEPTACLE	
⚠ J2			E58-0863-15	RECTANGULAR RECEPTACLE	
J3			E58-0879-05	RECTANGULAR RECEPTACLE	
J4			E56-0834-05	CYLINDRICAL RECEPTACLE	
J5			E63-0852-05	PIN JACK	
CF51			L72-0781-05	CERAMIC FILTER	
CF52 , 53			L72-0716-05	CERAMIC FILTER	
CF54			L72-0743-05	CERAMIC FILTER	
L1			L33-1170-05	CHOKE COIL ASSY	

E : KDC-4024 **Z** : KDC-4024Y **M2** : KDC-3023R
E1 : KDC-4024V **Z1** : KDC-4024YV

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ELECTRIC UNIT (X25-961x-xx)

Ref. No.	Add	New	Parts No.	Description	Destination
L2			L33-1807-05	CHOKE COIL	
L4			L33-1123-05	LINE FILTER COIL	
L101			L40-4795-91	SMALL FIXED INDUCTOR(4.7UH,J)	
L501			L40-6891-58	SMALL FIXED INDUCTOR	
L502			L40-3301-58	SMALL FIXED INDUCTOR(33U)	
L503			L40-1021-56	SMALL FIXED INDUCTOR(1MH)	
L504			L40-1011-58	SMALL FIXED INDUCTOR	
L505		＊	L31-0967-05	FM-RF COIL	
L506		＊	L31-0970-05	FM-RF COIL	
L507		＊	L32-0933-05	OSCILATING COIL	
L508		＊	L30-0770-05	FM IFT	
L509		＊	L30-0771-05	AM IFT	
L510-517			L40-4795-91	SMALL FIXED INDUCTOR(4.7UH,J)	
X1			L77-1167-05	CRYSTAL RESONATOR(4.19M)	
X2			L77-2002-05	CRYSTAL RESONATOR	
X501			L77-2077-05	CRYSTAL RESONATOR	
D	2D		N83-3005-46	PAN HEAD TAPTITE SCREW	
E	2D		N80-3010-46	PAN HEAD TAPTITE SCREW	
F	2D		N83-3020-46	PAN HEAD TAPTITE SCREW	
G	2D		N86-2606-46	BINDING HEAD TAPTITE SCREW	
CP1			R90-1049-05	MULTI-COMP 10K X2	
CP2			R90-1047-05	MULTI-COMP 2.2K X2	
CP3			R90-1046-05	MULTI-COMP 1K X2	
R10			RK73FB2B303J	CHIP R 30K J 1/8W	
R11			RK73GB2A103J	CHIP R 10K J 1/10W	
R12			RK73GB2A104J	CHIP R 100K J 1/10W	
R20			RD14DB2H332J	SMALL-RD 3.3K J 1/2W	
R21			RD14BB2C333J	RD 33K J 1/6W	
R22			RK73GB2A103J	CHIP R 10K J 1/10W	
R23			RK73GB2A104J	CHIP R 100K J 1/10W	
R25			RD14BB2C472J	RD 4.7K J 1/6W	
R28			RD14BB2C472J	RD 4.7K J 1/6W	
R30			RD14BB2C103J	RD 10K J 1/6W	
R31			RK73GB2A473J	CHIP R 47K J 1/10W	
R32			RK73GB2A223J	CHIP R 22K J 1/10W	
R50			RD14BB2C562J	RD 5.6K J 1/6W	
R51			RK73GB2A473J	CHIP R 47K J 1/10W	
R57			RK73FB2B152J	CHIP R 1.5K J 1/8W	
R58			RK73GB2A471J	CHIP R 470 J 1/10W	
R68 , 69			RK73GB2A103J	CHIP R 10K J 1/10W	
R71			RK73GB2A823J	CHIP R 82K J 1/10W	
R72			RK73GB2A363J	CHIP R 36K J 1/10W	
R73			RK73GB2A104J	CHIP R 100K J 1/10W	
R101			RD14BB2C241J	RD 240 J 1/6W	
R102-104			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R105			RK73GB2A471J	CHIP R 470 J 1/10W	
R106			RK73GB2A104J	CHIP R 100K J 1/10W	
R107 , 108			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R110			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R113 , 114			RK73GB2A473J	CHIP R 47K J 1/10W	
R115			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R116			RK73GB2A103J	CHIP R 10K J 1/10W	
R117			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R118			RK73GB2A103J	CHIP R 10K J 1/10W	

Ref. No.	Add	New	Parts No.	Description	Destination
R119			RK73GB2A473J	CHIP R 47K J 1/10W	
R121			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R122			RK73GB2A101J	CHIP R 100 J 1/10W	
R123			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R125			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R126			RK73GB2A104J	CHIP R 100K J 1/10W	
R127			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R128			RK73GB2A225J	CHIP R 2.2M J 1/10W	
R129,130			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R131			RK73GB2A682J	CHIP R 6.8K J 1/10W	
R132			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R133			RK73GB2A123J	CHIP R 12K J 1/10W	
R134			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R135			RK73GB2A473J	CHIP R 47K J 1/10W	E1Z1
R136			RK73GB2A473J	CHIP R 47K J 1/10W	EZ
R136 , 137			RK73GB2A473J	CHIP R 47K J 1/10W	M2
R138 , 139			RK73GB2A473J	CHIP R 47K J 1/10W	EE1ZZ1
R139			RK73GB2A473J	CHIP R 47K J 1/10W	M2
R141			RD14BB2C472J	RD 4.7K J 1/6W	
R143			RD14BB2C472J	RD 4.7K J 1/6W	
R144			RK73GB2A104J	CHIP R 100K J 1/10W	
R145			RD14BB2C222J	RD 2.2K J 1/6W	
R163			RD14BB2C100J	RD 10 J 1/6W	
R164 , 165			RD14BB2C471J	RD 470 J 1/6W	
R166			RD14BB2C102J	RD 1.0K J 1/6W	
R167			RD14BB2C101J	RD 100 J 1/6W	
R168-170			RD14BB2C102J	RD 1.0K J 1/6W	
R171			RD14BB2C470J	RD 47 J 1/6W	
R172			RD14BB2C102J	RD 1.0K J 1/6W	
R174			RK73GB2A473J	CHIP R 47K J 1/10W	
R201			RK73GB2A473J	CHIP R 47K J 1/10W	
R204			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R205			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R223 , 224			RK73FB2B271J	CHIP R 270 J 1/8W	
R227 , 228			RD14BB2C303J	RD 30K J 1/6W	
R231 , 232			RD14BB2C101J	RD 100 J 1/6W	
R255			RK73GB2A333J	CHIP R 33K J 1/10W	
R257			RK73GB2A622J	CHIP R 6.2K J 1/10W	
R258			RK73GB2A221J	CHIP R 220 J 1/10W	
R259			RD14BB2C223J	RD 22K J 1/6W	
R261			RK73GB2A100J	CHIP R 10 J 1/10W	
R263			RK73GB2A432J	CHIP R 4.3K J 1/10W	
R264			RK73GB2A473J	CHIP R 47K J 1/10W	
R351 , 352			RD14BB2C222J	RD 2.2K J 1/6W	
R353			RK73EB2E222J	CHIP R 2.2K J 1/4W	
R401 , 402			RD14BB2C100J	RD 10 J 1/6W	
R403			RD14BB2C4R7J	RD 4.7 J 1/6W	
R404			RD14BB2C101J	RD 100 J 1/6W	
R405-409			RD14BB2C472J	RD 4.7K J 1/6W	
R410 , 411			RD14BB2C101J	RD 100 J 1/6W	
R412-415			RK73GB2A104J	CHIP R 100K J 1/10W	
R501			RK73GB2A682J	CHIP R 6.8K J 1/10W	
R502			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R503			RK73EB2E222J	CHIP R 2.2K J 1/4W	
R505			RK73GB2A102J	CHIP R 1.0K J 1/10W	

E : KDC-4024 **Z** : KDC-4024Y **M2** : KDC-3023R
E1 : KDC-4024V **Z1** : KDC-4024YV

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KDC-3023R,4024/V/Y/YV

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ELECTRIC UNIT (X25-961x-xx)

Ref. No.	Add	New	Parts No.	Description	Destination
R506			RK73GB2A105J	CHIP R 1.0M J 1/10W	
R507			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R521-524			RK73GB2A104J	CHIP R 100K J 1/10W	
R525			RK73GB2A331J	CHIP R 330 J 1/10W	
R526			RK73GB2A562J	CHIP R 5.6K J 1/10W	
R527			RK73GB2A104J	CHIP R 100K J 1/10W	
R528			RD14BB2C104J	RD 100K J 1/6W	
R541			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R542			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R543			RK73GB2A562J	CHIP R 5.6K J 1/10W	
R544			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R545			RK73GB2A432J	CHIP R 4.3K J 1/10W	
R546			RK73GB2A333J	CHIP R 33K J 1/10W	
R547			RK73GB2A220J	CHIP R 22 J 1/10W	
R561			RK73GB2A272J	CHIP R 2.7K J 1/10W	
R563 , 564			RK73GB2A103J	CHIP R 10K J 1/10W	
R565			RK73GB2A104J	CHIP R 100K J 1/10W	
R566 , 567			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R581			RK73GB2A102J	CHIP R 1.0K J 1/10W	
W156 , 157			R92-2053-05	CHIP R 0 J 1/8W	
W158			R92-1252-05	CHIP R 0 OHM J 1/16W	
W161 , 162			R92-2053-05	CHIP R 0 J 1/8W	
W165			R92-2053-05	CHIP R 0 J 1/8W	
W405 , 406			R92-1252-05	CHIP R 0 OHM J 1/16W	
W409 , 410			R92-1252-05	CHIP R 0 OHM J 1/16W	
W415			R92-2053-05	CHIP R 0 J 1/8W	
W500 , 501			R92-1252-05	CHIP R 0 OHM J 1/16W	
W504 , 505			R92-1252-05	CHIP R 0 OHM J 1/16W	
W506			R92-2053-05	CHIP R 0 J 1/8W	
W507			R92-1252-05	CHIP R 0 OHM J 1/16W	
W508			R92-2053-05	CHIP R 0 J 1/8W	
W509			R92-1252-05	CHIP R 0 OHM J 1/16W	
W510			R92-2053-05	CHIP R 0 J 1/8W	
W511 , 512			R92-1252-05	CHIP R 0 OHM J 1/16W	
W516			R92-1252-05	CHIP R 0 OHM J 1/16W	
W517			R92-2053-05	CHIP R 0 J 1/8W	
W519			R92-2053-05	CHIP R 0 J 1/8W	
W521			R92-1252-05	CHIP R 0 OHM J 1/16W	
W523 , 524			R92-1252-05	CHIP R 0 OHM J 1/16W	
W530			R92-2053-05	CHIP R 0 J 1/8W	
W531 , 532			R92-1252-05	CHIP R 0 OHM J 1/16W	
W533			R92-2053-05	CHIP R 0 J 1/8W	
W534			R92-1252-05	CHIP R 0 OHM J 1/16W	
W578			R92-1252-05	CHIP R 0 OHM J 1/16W	
W601			R92-1252-05	CHIP R 0 OHM J 1/16W	
D1			S2V20*A	DIODE	
D1			1N5393G-M6	DIODE	
D3			IMSA-6801	SURGE ABSORBER	
D10			MA4068(N)-M	ZENER DIODE	
D11			D1F60	DIODE	
D12			AM01Z	DIODE	
D13			D1F60	DIODE	
D14			AM01Z	DIODE	
D20			MA4068(N)-M	ZENER DIODE	
D30			MA4047-M	ZENER DIODE	

Ref. No.	Add	New	Parts No.	Description	Destination
D40			1SS133	DIODE	
D50			DAN202U	DIODE	
D51			MA4082(N)-L	ZENER DIODE	
D70			MA4068(N)-M	ZENER DIODE	
D101			1SS133	DIODE	
D103			DA204U	DIODE	
D106			MA4062-L	ZENER DIODE	
D107			MA3062WA	ZENER DIODE	
D108 , 109			MA4062-L	ZENER DIODE	
D110			HZS12A2	ZENER DIODE	
D201 , 202			MA4068(N)-M	ZENER DIODE	
D251-253			1SS133	DIODE	
D261-263			AM01Z	DIODE	
D264			D1F60	DIODE	
D264			S1J	DIODE	
D265 , 266			AM01Z	DIODE	
D267 , 268			D1F60	DIODE	
D267 , 268			S1J	DIODE	
D401 , 402			MA4068(N)-M	ZENER DIODE	
D403-405			MA4062-L	ZENER DIODE	
D407-410			MA4062-L	ZENER DIODE	
D411			MA3062WA	ZENER DIODE	
D501			RN739F	DIODE	
D503			RN739F	DIODE	
D504-506		*	KV1720S	VARIABLE CAPACITANCE DIODE	
IC1		*	UPD780058GC502	MI-COM IC	
IC4			TDA7560	ANALOGUE IC	
IC6		*	TDA7479AD	ANALOGUE IC	
IC7			BA4911-V4	ANALOGUE IC	
IC8			HD74HC27FP	MOS-IC	
IC10		*	TDA7513	ANALOGUE IC	
IC11		*	PST3435UL	MOS-IC	
IC12			BR24C01AF-W	MEMORY IC	
IC12			M24C01-WMN6T	MEMORY IC	
IC12		*	S-24CS02AFJ-TB	MEMORY IC	
Q10			2SC4081	TRANSISTOR	
Q20			2SC4081	TRANSISTOR	
Q40			DTA124EUA	DIGITAL TRANSISTOR	
Q50			2SA1036K	TRANSISTOR	
Q51			UMC2N	TRANSISTOR	
Q55			2SD2375	TRANSISTOR	
Q70			2SC4081	TRANSISTOR	
Q101			2SC4081	TRANSISTOR	
Q102			DTA114YUA	DIGITAL TRANSISTOR	
Q201			2SC4081	TRANSISTOR	
Q223 , 224			DTC143TUA	DIGITAL TRANSISTOR	
Q252		*	UMG4N	TRANSISTOR	
Q253		*	UMA1N	TRANSISTOR	
Q501		*	CPH5905	TRANSISTOR	
Q502			3SK126	FET	
Q503			2SC4081	TRANSISTOR	
TH1			PTH9C42BE471Q	POSITIVE RESISTOR	
CD PLAYER UNIT (X32-5380-00)					
C1			C92-0566-05	CHIP-TAN 10UF 6.3WV	

E : KDC-4024 **Z** : KDC-4024Y **M2** : KDC-3023R
E1 : KDC-4024V **Z1** : KDC-4024YV

⚠ indicates safety critical components.

PARTS LIST

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CD PLAYER UNIT (X32-5380-00)

Ref. No.	Add	New	Parts No.	Description	Destination
C2			CK73FB1A225K	CHIP C 2.2UF K	
C3			CK73GB0J105K	CHIP C 1.0UF K	
C5			CC73GCH1H020C	CHIP C 2.0PF C	
C6			CC73GCH1H390J	CHIP C 39PF J	
C7			CK73GB1C104K	CHIP C 0.10UF K	
C8			CK73GB0J105K	CHIP C 1.0UF K	
C9			CK73GB1H472K	CHIP C 4700PF K	
C10			CK73GB1C333K	CHIP C 0.033UF K	
C11			CK73GB1H682K	CHIP C 6800PF K	
C12			CK73GB1H332K	CHIP C 3300PF K	
C13			CC73GCH1H271J	CHIP C 270PF J	
C14			CK73GB1H472K	CHIP C 4700PF K	
C15			CK73GB1H222K	CHIP C 2200PF K	
C16			CC73GCH1H331J	CHIP C 330PF J	
C17 , 18			CK73GB1C104K	CHIP C 0.10UF K	
C31 -34			CK73GB1C104K	CHIP C 0.10UF K	
C36			CK73FB1A225K	CHIP C 2.2UF K	
C37 -39			CK73GB1H103K	CHIP C 0.010UF K	
C40			CK73GB1H153K	CHIP C 0.015UF K	
C41			CK73GB1H102K	CHIP C 1000PF K	
C42			CK73GB1E473K	CHIP C 0.047UF K	
C43			CK73GB1H222K	CHIP C 2200PF K	
C44			CK73GB1H102K	CHIP C 1000PF K	
C45 -47			CK73GB1C104K	CHIP C 0.10UF K	
C48			CK73GB1H682K	CHIP C 6800PF K	
C49			CK73GB1H152K	CHIP C 1500PF K	
C50			CK73GB1H682K	CHIP C 6800PF K	
C51			CK73GB1H152K	CHIP C 1500PF K	
C52			CK73GB1C104K	CHIP C 0.10UF K	
C61			CK73FB1A225K	CHIP C 2.2UF K	
C69 -72			CK73GB1H222K	CHIP C 2200PF K	
C75 , 76			CK73GB1H682K	CHIP C 6800PF K	
C100-102			CK73GB1H102K	CHIP C 1000PF K	
CN1			E40-9536-05	FLAT CABLE CONNECTOR	
CN1			E41-0193-05	FLAT CABLE CONNECTOR	
CN2			E40-9339-05	FLAT CABLE CONNECTOR	
CN2			E41-0129-05	FLAT CABLE CONNECTOR	
X1			L78-0851-05	RESONATOR (16.93MHZ)	
CP1			R90-1019-05	MULTI-COMP 100 X2	
CP2			R90-1014-05	MULTI-COMP 100 X4	
CP3 , 4			R90-0974-05	MULT R 1.8K X4	
CP5			R90-0720-05	MULTI-COMP 100K X4	
R1			RK73GB2A910J	CHIP R 91 J 1/10W	
R2 , 3			RK73GB2A562J	CHIP R 5.6K J 1/10W	
R4			RK73FB2B100J	CHIP R 10 J 1/8W	
R5 , 6			RK73GB2A332J	CHIP R 3.3K J 1/10W	
R7			RK73GB2A362J	CHIP R 3.6K J 1/10W	
R8			RK73GB2A273J	CHIP R 27K J 1/10W	
R9			RK73GB2A392J	CHIP R 3.9K J 1/10W	
R10			RK73GB2A104J	CHIP R 100K J 1/10W	
R11			RK73GB2A333J	CHIP R 33K J 1/10W	
R12			RK73GB2A244J	CHIP R 240K J 1/10W	
R13			RK73GB2A914J	CHIP R 910K J 1/10W	
R14			RK73GB2A104J	CHIP R 100K J 1/10W	
R15			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R31			RK73GB2A273J	CHIP R 27K J 1/10W	
R32			RK73GB2A103J	CHIP R 10K J 1/10W	
R33			RK73GB2A183J	CHIP R 18K J 1/10W	
R34			RK73GB2A103J	CHIP R 10K J 1/10W	
R35			RK73GB2A393J	CHIP R 39K J 1/10W	
R36			RK73GB2A103J	CHIP R 10K J 1/10W	
R37			RK73GB2A622J	CHIP R 6.2K J 1/10W	
R38			RK73GB2A224J	CHIP R 220K J 1/10W	
R39			RK73GB2A104J	CHIP R 100K J 1/10W	
R40			RK73GB2A821J	CHIP R 820 J 1/10W	
R41			RK73GB2A473J	CHIP R 47K J 1/10W	
R42			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R43			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R44 , 45			RK73GB2A103J	CHIP R 10K J 1/10W	
R46			RK73GB2A273J	CHIP R 27K J 1/10W	
R47			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R48			RK73GB2A103J	CHIP R 10K J 1/10W	
R49			RK73GB2A393J	CHIP R 39K J 1/10W	
R50			RK73GB2A392J	CHIP R 3.9K J 1/10W	
R51			RK73GB2A103J	CHIP R 10K J 1/10W	
R52 , 53			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R71			RK73GB2A133J	CHIP R 13K J 1/10W	
R72			RK73FB2B201J	CHIP R 200 J 1/8W	
R81 , 82			RK73FB2B331J	CHIP R 330 J 1/8W	
R85 , 86			RK73FB2B331J	CHIP R 330 J 1/8W	
R87 , 88			RK73FB2B101J	CHIP R 100 J 1/8W	
R93			RK73GB2A104J	CHIP R 100K J 1/10W	
R100			RK73GB2A100J	CHIP R 10 J 1/10W	
S1 , 2			S68-0863-05	PUSH SWITCH	
S3			S68-0862-05	PUSH SWITCH	
D1			DAN202U	DIODE	
D1			MA142WK	DIODE	
D2			MA8051-L	ZENER DIODE	
D3			DA204U	DIODE	
IC1			AN22002AA	ANALOGUE IC	
IC2		*	MN6627771KP	MOS-IC	
IC3			BA5824FP	ANALOGUE IC	
Q1			MCH6101	TRANSISTOR	
Q2			2SA1362(Y)	TRANSISTOR	
Q3			DTC124EUA	DIGITAL TRANSISTOR	
Q3			UN5212	DIGITAL TRANSISTOR	
Q4			DTA143XUA	DIGITAL TRANSISTOR	
Q5			2SC4081	TRANSISTOR	
Q6			2SA1576A	TRANSISTOR	

CD MECHANISM ASSY (X92-4640-00)

2	1B		A10-4827-12	CHASSIS
5	1B		D10-4576-33	ARM ASSY
8	2A		D10-4579-03	LEVER ASSY
10	3A		D10-4581-13	ARM
11	2A		D10-4582-13	ARM
12	3A		D10-4583-03	ARM

E : KDC-4024 **Z** : KDC-4024Y **M2** : KDC-3023R
E1 : KDC-4024V **Z1** : KDC-4024YV

⚠ indicates safety critical components.

KDC-3023R,4024/V/Y/YV

PARTS LIST

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Teile ohne **Parts No.** werden nicht geliefert.

CD MECHANISM ASSY (X92-4640-00)

Ref. No.	Add	New	Parts No.	Description	Destination
13	3A		D10-4584-03	ARM	
14	3B		D10-4585-03	ARM	
15	2A		D10-4586-13	SLIDER	
16	3B		D10-4587-22	SLIDER	
17	3B		D10-4588-03	SLIDER	
18	3B		D10-4595-04	ARM	
19	3B		D10-4596-14	ARM	
22	2A		D13-2151-04	GEAR	
23	2B		D13-2152-04	GEAR	
24	3B		D13-2153-04	GEAR	
25	3B		D13-2154-04	GEAR	
26	3B		D13-2155-04	WORM	
27	3B		D13-2156-14	GEAR	
28	3B		D13-2157-04	GEAR	
29	3B		D13-2158-04	GEAR	
30	3B		D13-2168-04	GEAR	
31	3B		D13-2171-04	GEAR	
32	2B		D13-2172-03	RACK (GEAR)	
33	2A		D14-0759-04	ROLLER	
35	2B		D21-2382-04	SHAFT	
36	1A		D23-0954-04	RETAINER	
37	1B		D39-0246-05	DAMPER	
38	2B		G01-3072-04	EXTENSION SPRING	
39	2A		G01-3073-04	TORSION COIL SPRING	
40	2A		G01-3074-04	EXTENSION SPRING	
41	1B		G01-3075-04	EXTENSION SPRING	
42	2A		G01-3076-04	EXTENSION SPRING	
43	1B		G01-3077-04	EXTENSION SPRING	
44	2B		G02-1399-04	FLAT SPRING	
45	2B		G02-1408-04	FLAT SPRING	
51	1A		J21-9676-22	MOUNTING HARDWARE	
52	3B		J21-9677-02	MOUNTING HARDWARE	
53	1B		J21-9678-03	MOUNTING HARDWARE	
55	1A		J90-1001-11	GUIDE	
56	1B		J90-1023-03	GUIDE	
A	2B		N09-4460-05	TAPTITE SCREW (OVAL P TAPTIT)	
B	1B		N09-4472-05	MACHINE SCREW (M1.7X8.5)	
C	2B		N09-6004-05	MACHINE SCREW (M1.7X2.5 IB-L)	
E	2B		N09-6007-05	MACHINE SCREW (PAN M2X2)	
F	1A		N09-6051-05	TAPTITE SCREW (BIND P+ 2X5)	
G	2A		N19-2163-04	FLAT WASHER	
H	1B		N39-2020-46	PAN HEAD MACHIN SCREW	
J	1B		N09-6108-05	MACHINE SCREW (M2*3.5TYPE3)	
DM1	3B		T42-1066-04	DC MOTOR ASSY (SP)	
DM2	2B		T42-1067-04	DC MOTOR ASSY (LO)	
DPU1	2D		X93-2010-00	OPTICAL PICKUP ASSY	

Ref. No.	Add	New	Parts No.	Description	Destination

E : KDC-4024 **Z** : KDC-4024Y **M2** : KDC-3023R
E1 : KDC-4024V **Z1** : KDC-4024YV

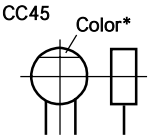
⚠ indicates safety critical components.

PARTS LIST

CAPACITORS

CC 45 TH 1H 220 J
1 2 3 4 5 6

1 = Type ... ceramic, electrolytic, etc.
2 = Shape ... round, square, etc.
3 = Temp. coefficient
4 = Voltage rating
5 = Value
6 = Tolerance



• Capacitor value

010 = 1pF
100 = 10pF
101 = 100pF
102 = 1000pF = 0.001μF
103 = 0.01μF

2 2 0 = 22pF
Multiplier
2nd number
1st number

• Temperature coefficient

1st Word	C	L	P	R	S	T	U
Color*	Black	Red	Orange	Yellow	Green	Blue	Violet
ppm/°C	0	–80	–150	–220	–330	–470	–750

2nd Word	G	H	J	K	L
ppm/°C	±30	±60	±120	±250	±500

Example : CC45TH = –470±60ppm/°C

• Tolerance (More than 10pF)

Code	C	D	G	J	K	M	X	Z	P	No code
(%)	±0.25	±0.5	±2	±5	±10	±20	+40 –20	+80 –20	+100 –0	More than 10μF : –10~+50 Less than 4.7μF : –10~+75

(Less than 10pF)

Code	B	C	D	F	G
(pF)	±0.1	±0.25	±0.5	±1	±2

• Voltage rating

2nd word / 1st word	A	B	C	D	E	F	G	H	J	K	V
0	1.0	1.25	1.6	2.0	2.5	3.15	4.0	5.0	6.3	8.0	–
1	10	12.5	16	20	25	31.5	40	50	63	80	35
2	100	125	160	200	250	315	400	500	630	800	–
3	1000	1250	1600	2000	2500	2150	4000	5000	6300	8000	–

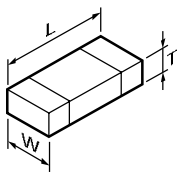
CHIP CAPACITORS

(EX) CC 73 F SL 1H 000 J
1 2 3 4 5 6 7
(Chip) (CH, RH, UJ, SL)

(EX) CK 73 F F 1H 000 Z
1 2 3 4 5 6 7
(Chip) (B, F)

Refer to the table above.
1 = Type
2 = Shape
3 = Dimension
4 = Temp. coefficient
5 = Voltage rating
6 = Value
7 = Tolerance

• Dimension



Chip capacitor

Code	L	W	T
Empty	5.6±0.5	5.0±0.5	Less than 2.0
A	4.5±0.5	3.2±0.4	Less than 2.0
B	4.5±0.5	2.0±0.3	Less than 2.0
C	4.5±0.5	1.25±0.2	Less than 1.25
D	3.2±0.4	2.5±0.3	Less than 1.5
E	3.2±0.2	1.6±0.2	Less than 1.25
F	2.0±0.3	1.25±0.2	Less than 1.25
G	1.6±0.2	0.8±0.2	Less than 1.0
H	1.0±0.05	0.5±0.05	0.5±0.05

Chip resistor

Code	L	W	T
E	3.2±0.2	1.6±0.2	1.0
F	2.0±0.3	1.25±0.2	1.0
G	1.6±0.2	0.8±0.2	0.5±0.1
H	1.0±0.05	0.5±0.05	0.35±0.05

RESISTORS

• Chip resistor (Carbon)

(EX) RD 73 E B 2B 000 J
1 2 3 4 5 6 7
(Chip) (B, F)

• Carbon resistor (Normal type)

(EX) RD 14 B B 2C 000 J
1 2 3 4 5 6 7
(Chip) (B, F)

1 = Type ... ceramic, electrolytic, etc.
2 = Shape ... round, square, etc.
3 = Dimension
4 = Temp. coefficient
5 = Voltage rating
6 = Value
7 = Tolerance

• Rating wattage

Code	Wattage	Code	Wattage	Code	Wattage
1J	1/16W	2C	1/6W	3A	1W
2A	1/10W	2E	1/4W	3D	2W
2B	1/8W	2H	1/2W		

KDC-3023R,4024/V/Y/YV

SPECIFICATIONS

		KDC-3023R	KDC-4024/V/Y/YV
FM	Frequency Range	87.5MHz-108.0MHz	87.5MHz-108.0MHz
	Frequency Step	50kHz	50kHz
	Usable Sensitivity	8.1dBf	8.1dBf
	S/N:26dB	(0.7μV/75Ω)	(0.7μV/75Ω)
	Quieting Sensitivity	15.2dBf	15.2dBf
	S/N 46dB	(1.6μV/75Ω)	(1.6μV/75Ω)
	Frequency Response (±3.0dB)	30Hz-15kHz	30Hz-15kHz
	SN (dB)	65dB (MONO)	65dB (MONO)
	Selectivity (DIN)(dB)	≧80dB (±400kHz)	≧80dB (±400kHz)
	Stereo Separation	35dB (1kHz)	35dB (1kHz)
MW	Frequency Range (kHz)	531kHz-1611kHz	531kHz-1611kHz
	Frequency Step	9kHz	9kHz
	Usable Sensitivity	28dBμ (25μv)	25μv
	(S/N 20dB)		
LW	Frequency Range (kHz)	153kHz-281kHz	153kHz-281kHz
	Usable Sensitivity	45μV	45μV
	(S/N 20dB)		
CD	Laser Diode	GaAlAs (λ=780nm)	GaAlAs (λ=780nm)
	Digital Filter (D/A)	8 times Over Sampling	8 times Over Sampling
	D/A Converter	1 Bit	1 Bit
	Spindle Speed	500-200 (CLV)	500-200 (CLV)
	Wow & Flutter	Below Mesurable Limit	Below Mesurable Limit
	Frequency Respons	10-20kHz	10-20kHz
	THD	0.01% (1kHz)	0.01% (1kHz)
	S/N Ratio (dB)	96dB (1kHz)	96dB (1kHz)
	Dynamic Range	93dB	93dB
	Channel Speparation	85dB	85dB
Preout Level (mV) /Load		2000mV/10kΩ (CD/CD-CH)	2000mV/10kΩ (CD/CD-CH)
Preout Impedance (Ω)		≦600Ω	≦600Ω
AMP	Maximum Power	50wx4	50wx4
	Full Bandwidth Power (at less than 1% THD)	22wx4	–
	Power DIN45324,+B=14.4v	–	30wx4
TONE	Bass	100Hz ±10dB	100Hz±10dB
	Middle	1kHz ±10dB	1kHz ±10dB
	Treble	10kHz ±10dB	10kHz±10dB
GENE	Operating voltage (11~16v allowable)	14.4v	14.4v
	Current Consumption	10A	10A
	Installation Size (W)	182 (mm) 7-3/16 (in)	182 (mm) 7-3/16 (in)
	(H)	53 (mm) 2-1/16 (in)	53 (mm) 2-1/16 (in)
	(D)	157 (mm) 6-3/16 (in)	157 (mm) 6-3/16 (in)
	Weight	3.1lbs (1.4kg)	3.1lbs (1.4kg)

KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

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Malaysia

CD MECHANISM ASSY

X92-4030-0x
X92-4440-0x

SERVICE MANUAL

KENWOOD

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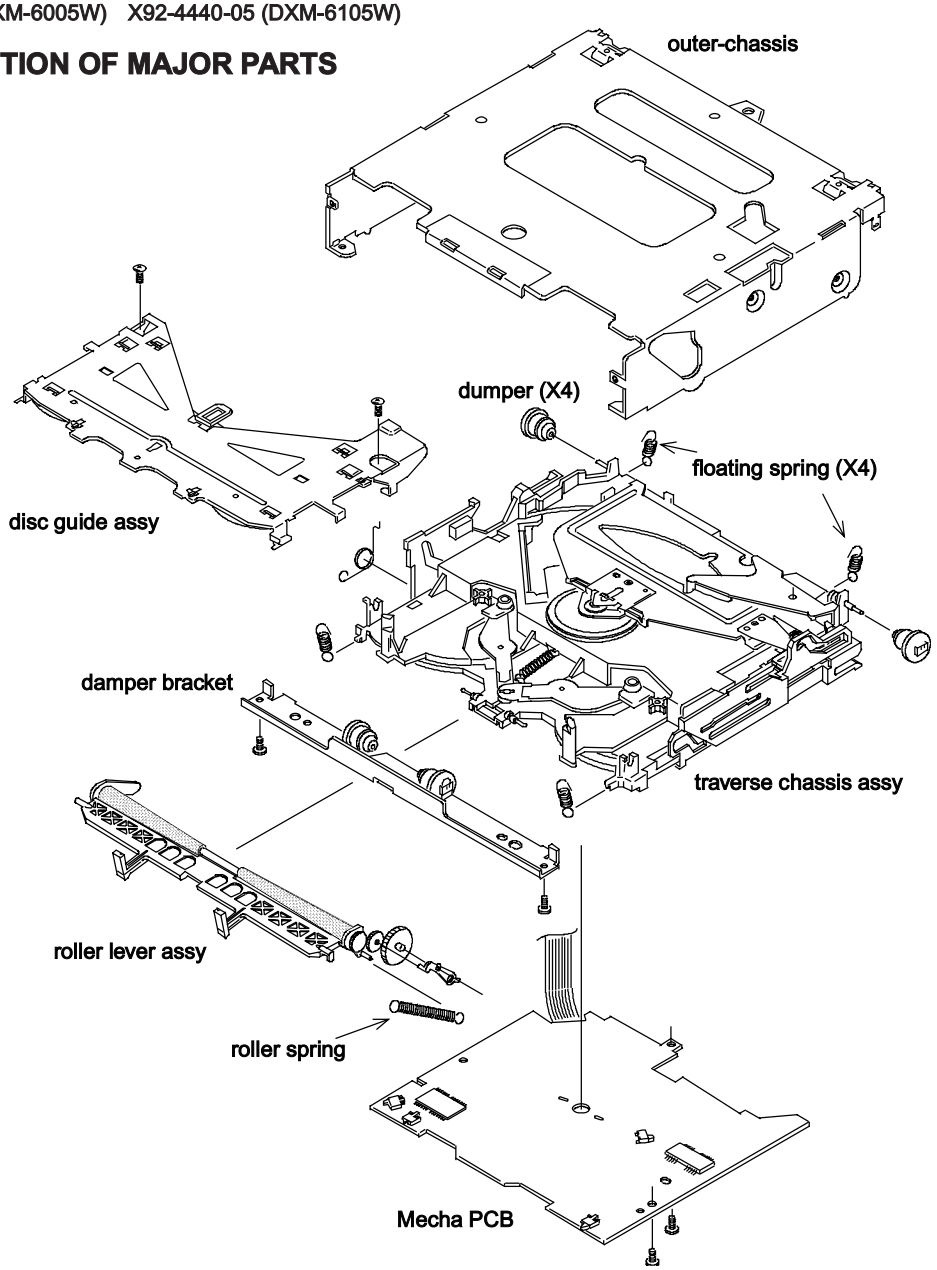
B51-7867-00 (N) 3417

DESCRIPTION MECHANISM

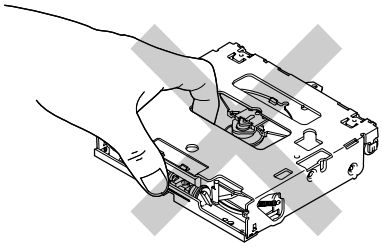
X92-4030-00 (DXM-6000W)	X92-4440-00 (DXM-6100W)
X92-4030-01 (DXM-6001W)	X92-4440-01 (DXM-6101W)
X92-4030-02 (DXM-6002W)	X92-4440-02 (DXM-6102W)
X92-4030-03 (DXM-6003W)	X92-4440-03 (DXM-6103W)
X92-4030-04 (DXM-6004W)	X92-4440-04 (DXM-6104W)
X92-4030-05 (DXM-6005W)	X92-4440-05 (DXM-6105W)

CONSTRUCTION OF MAJOR PARTS

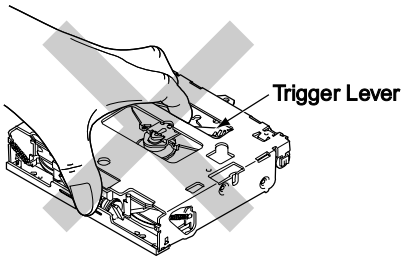


40%

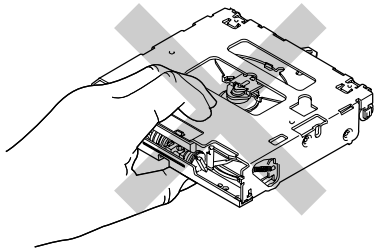
X92-4030-0x
X92-4440-0x NOTE FOR HANDLING MECHANISM ASSY



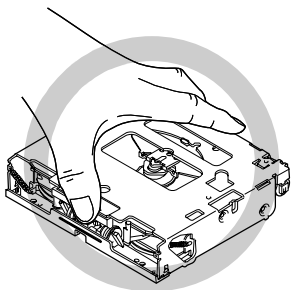
NG Pick is under the finger, it may touch.



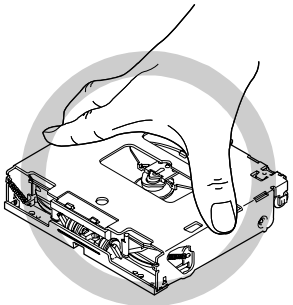
NG Don't touch the lever because the trigger lever comes off.



NG Don't have the center of entrance because the disc insertion mouth is transformed.



OK



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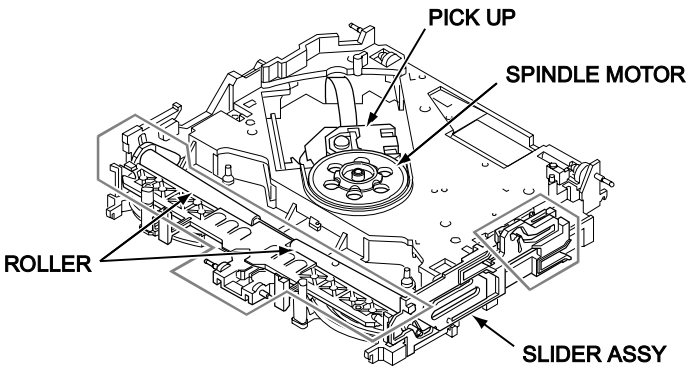
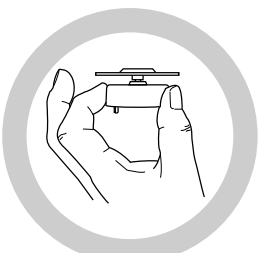
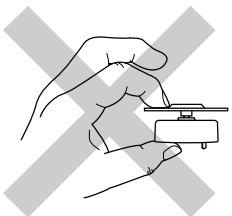


- Don't touch in the frame, since grease is applied to the parts.
- Don't applied grease to the roller.
- Don't touched PICK and SPINDLE MOTOR.



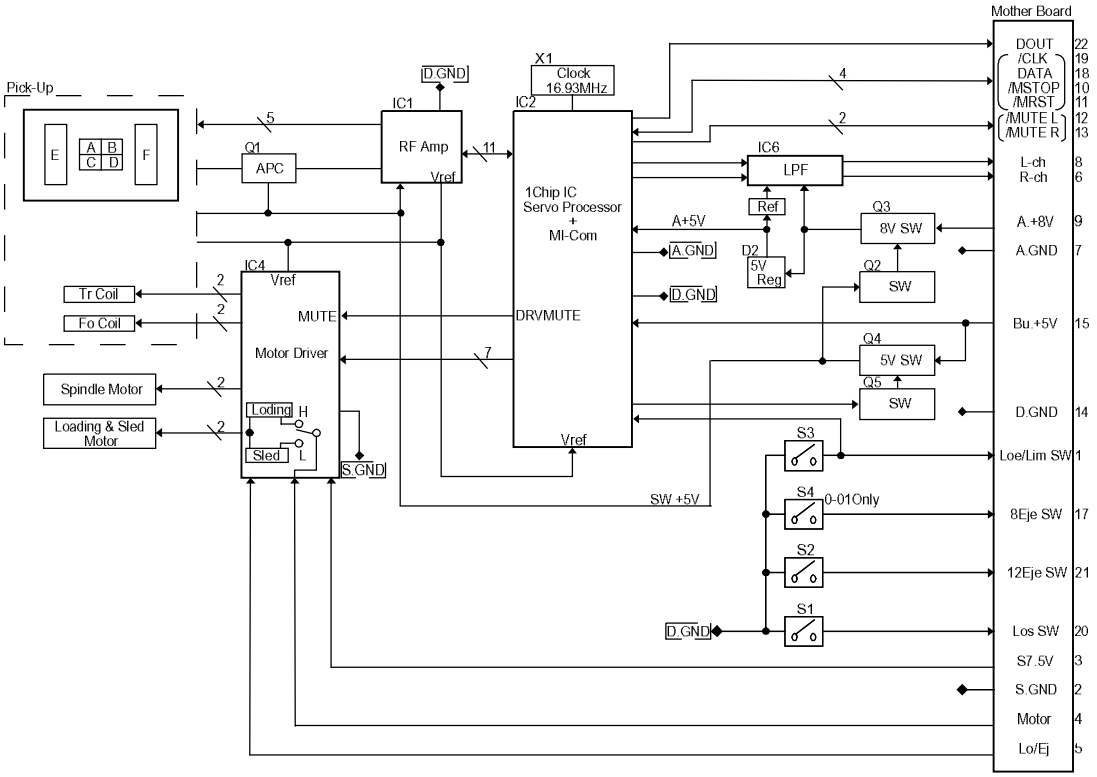
OK

OK



NG

BLOCK DIAGRAM



COMPONENTS DESCRIPTION

●CD PLAYER UNIT (X32-5170-0x/X32-5190-0x)

Ref.No.	Application/Function	Operation/Condition/Compatibility
IC1	CD-RW compatible RF amplifier	Generation of RF and servo error (focusing error, tracking error) signals based on the signals read from the APC circuit and pickup, detection of dropouts, anti-shock, track crossing and off-track signals, and gain switching for CD-RW.
IC2	CD signal processor LSI + Mechanism u-COM	Focusing, tracking, sled and spindle servo processing, automated processing (focusing, tracking, gain, offset and balance), digital signal processing (DSP, PLL, subcode, CIRC error correction and audio data interpolation), Text function (MN662773kH2), and microcomputer function.
IC4	4-CH BTL driver	Drive of the focusing coil, tracking coil, sled motor and spindle motor, plus loading and ejection operations.
IC6	Audio active filter	Secondary LPF
Q1	For APC (Auto Power Control)	LD drive.
Q2	Q3 SW	ON when P-ON = "H" (when SW +5 V is ON).
Q3	A.8V SW	ON when P-ON = "H" (when Q2 is ON).
Q4	D.5V SW	ON when P-ON = "H" (when Q5 is ON).
Q5	Q4 SW(P-ON)	ON when P-ON = "H".
D1	Pickup laser diode protection	
D2	D/A converter power supply diode	A.8V → A.5V
D3	For static protection	
D4	For forced gain boost (tracking servo)	

*P-ON: Pin 82 of IC2.

X92-4030-0x
X92-4440-0x MICROCOMPUTER'S TERMINAL DESCRIPTION

●Mechanism Microcomputer (IC2 : X32-5170-0x, X32-5190-0x)

Pin No.	Name.	I/O	Description	Processing Operation
1	BDO	I	Dropout signal input. H: Detected.	Photodetector signal input 1.
2	OFT	I	Off-track signal input. H: Detected.	Photodetector signal input 2.
3	/RFDET	I	RF detection signal input. H: Detected.	Photodetector signal input 3.
4	VDET	I	Vibration detection signal input. H: Detected.	Photodetector signal input 4.
5	LDON	O	Laser diode ON signal output. H: ON.	Photodetector RF signal add input.
6	NC	-	No connection.	RF amp filter terminal 1.
7	NC	-	No connection.	RF amp filter terminal 2.
8	AVSS3	I	Analog circuit GND.	
9	AVDD3	I	Analog circuit power supply.	
10	FBAL	O	Focusing balance adjustment output.	Laser diode monitor input.
11	TBAL	O	Tracking balance adjustment output.	Laser diode drive output.
12	FE	I	Focusing error signal input (D/A input).	
13	NC	-	No connection.	Tracking filter terminal 1.
14	NC	-	No connection.	Tracking filter terminal 1.
15	TE	I	Tracking error signal input (analog input).	
16	NC	-	No connection.	Track cross comparator filter terminal.
17	NC	-	No connection.	
18	NC	-	No connection.	RF signal input (for RF detection).
19	RFENV	I	RF envelope signal input.	
20	VREF	I	VREF input.	
21	ARF	I	RF signal input (for DSL).	
22	DRF	I	DSL bias terminal.	
23	DSLF	I/O	DSL loop filter terminal.	
24	IREF	I	Reference current input.	
25	PLLF	I/O	PLL loop filter terminal.	
26	PLLF2	I/O	PLL loop filter characteristic switching terminal.	
27	VCOF	I/O	VCO loop filter terminal.	
28	VCOF2	I/O	Digital servo 33.8688 MHz generation (VCO loop filter terminal).	
29	TRV	O	Traverse forced feed output.	
30	TVD	O	Traverse drive output.	
31	PC	O	Spindle motor ON output. L: ON.	
32	ECM	O	Spindle motor drive output (forced mode output) (D/A output).	
33	ECS	O	Spindle motor drive output (servo error signal output).	
34	KICK	O	Kick pulse output.	
35	TRD	O	Tracking drive output.	
36	FOD	O	Focusing drive output.	
37	TOFS	O	Tracking offset adjustment output.	
38	AVDD2	I	Analog circuit power supply (for DSL, PLL, AD and DA circuits).	
39	AVSS2	I	Analog circuit GND.	
40	DVSS2	I	Digital circuit GND.	
41	EFM or CK384	O	EFM signal output.	When command is executed: 16.9344 MHz clock output.
42	PCK or DSLB	O	PLL sampling clock output.	When command is executed: DSL balance output.
43	/CLDCK	O	Subcode frame clock signal output.	
44	FCLK	O	X'tal frame clock signal output.	
45	IPFLAG	O	Interpolation flag signal output. H: Interpolated.	
46	FLAG	O	Flag signal output.	
47	TRCRS	I	Track crossing signal input.	Track crossing signal output.
48	STOUT	O	Serial data output for monitor signal (OFT, VDET, BDO, RFDET, etc.)	
49	STLD	O	Load signal output for monitor signal.	
50	SMCK	O	Bit clock signal output for monitor signal.	

MICROCOMPUTER'S TERMINAL DESCRIPTION

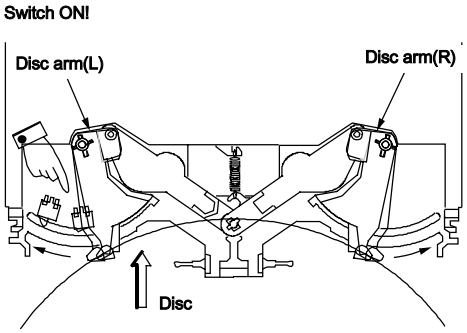
Pin No.	Name.	I/O	Description	Processing Operation
51	CSEL	I	X'tal oscillation frequency selection terminal, which is fixed at L. H: 33.8688 MHz. L: 16.9344 MHz.	
52	TEST1	I	Test pin 1. Fixed at L (normal position).	
53	TEST2	I	Test pin 2. Fixed at L (normal position).	
54	IOSEL	I	Audio DAC external data input mode selection terminal.	
55	/NRST	I	Reset input. L: Reset.	
56	BCLK	O	SRDATA bit clock output.	
57	LRCK	O	L/R identification signal output.	
58	SRDATA	O	Serial data output.	
59	SUBC	O	Subcode serial output.	
60	SBCK	I	Subcode serial output clock input.	
61	DQSY	O	CD-TEXT read permission signal output.	
62	DEMPH	O	De-emphasis detection signal output. H: ON.	
63	TX	O	Digital audio interface signal output.	
64	SRDATAIN	I	SRDATA input/test terminal.	
65	LRCKIN	I	LRCK input/SMCK output frequency switching.	
66	BCLKIN	I	BCLK input. When not used: VDD.	
67	DVDD1	I	Digital circuit power supply.	
68	X1	I	X'tal oscillator input terminal.	
69	X2	O	X'tal oscillator output terminal.	
70	DVSS1	I	Digital circuit GND.	
71	XSUB1	I	Microcomputer clock input terminal.	
72	XSUB2	O	Microcomputer clock output terminal.	
73	DVDD2	I	Digital circuit power supply.	
74	NC	O	No connection.	
75	NC	O	No connection.	
76	73/74SEL	I	73/74 selection port.	
77	DRV_MUTE	O	Driver muting control terminal.	
78	NC	O	No connection.	
79	NC	O	No connection.	
80	TEST	I	Test mode switching terminal.	
81	ASEL	I	Audio output polarity detection terminal.	
82	PON	O	Audio/digital power supply control terminal.	
83	SEARCH	O	Servo IC gain switching control terminal.	
84	EQCNT	O	RF amp double-speed switching control terminal.	
85	SW3	I	Limit switch detection terminal.	
86	/MUTE_L	O	L-CH analog muting control terminal.	
87	/MUTE_R	O	R-CH analog muting control terminal.	
88	CD_RW	O	CD-RW control terminal.	
89	/RST	I	System reset input terminal.	
90	MECHASEL	I	6000/6010 selection port.	L=6000 H=6010
91	/MSTOP	I	Standby detection terminal.	
92	LDCNT	O	LD control terminal.	
93	DATA	I/O	I2C bus data line (communication line with System controller).	
94	/CLK	I/O	I2C bus clock data line (communication line with System controller).	
95	HOT	I	Temperature protection detection terminal.	
96	VREF+	I	A/D converter + power supply.	
97	OUTR	O	R-channel audio output.	
98	AVDD1	I	Analog circuit power supply (for audio output circuits of both L and R channels).	
99	OUTL	O	L-channel audio output.	
100	AVSS1	I	Analog circuit GND (for audio output circuits of both L and R channels).	

OPERATION DESCRIPTION

[1] Disc Loading

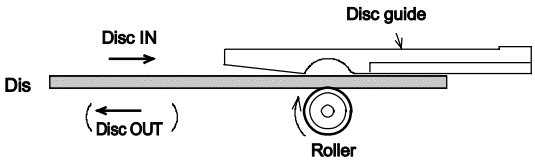
(1) Turning the loading switch ON

1) When a disc is inserted, the disc arms open to the left and right and the claw below disc arm (L) sets the loading switch ON.
2) The above starts the motor rotation.

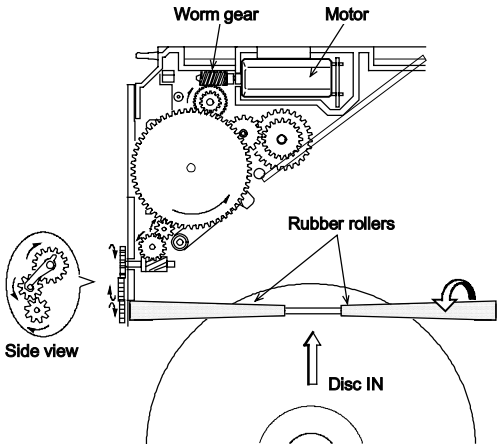


(2) Loading the disc

1) When the motor starts rotation, the worm gear also starts to turn as shown in the figure.
2) The rotation force is transmitted to the gear train.
3) When the force is transmitted to the final gear, the rollers rotate to pull in the disc.



The disc is pulled in or out when the rollers are pushed against the disc guide.



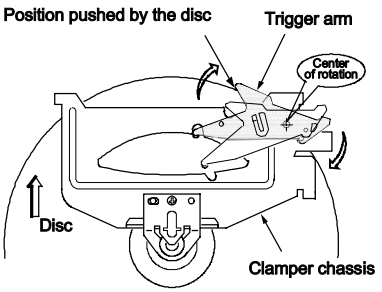
[2] Operation of Slider (R)

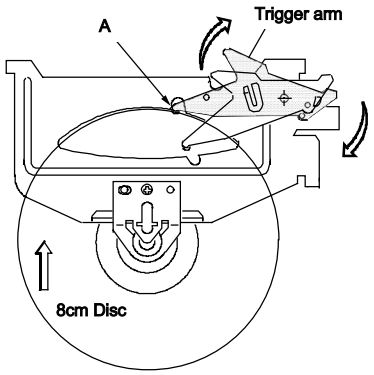
(1) Activating the trigger arm

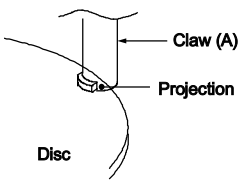
1) When the disc is pulled in by the rollers, the disc edge pushes the trigger arm and rotates it.

2) When the disc is an 8cm disc, it is pulled upwards by the tapering on the disc guide. The trigger arm is rotated when the disc pushes the claw (section A) located before the trigger arm.

When the 8cm disc reaches the loading end position, the roller areas supporting the disc decreases. To prevent the disc from dropping in this case, the claw is provided with a projection for supporting the disc.

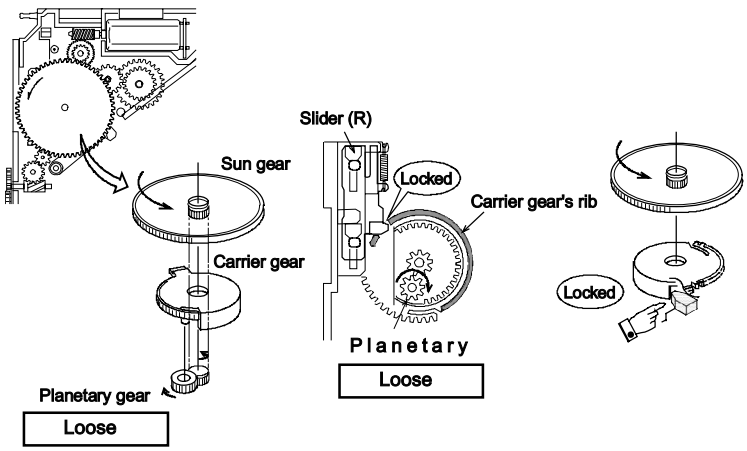






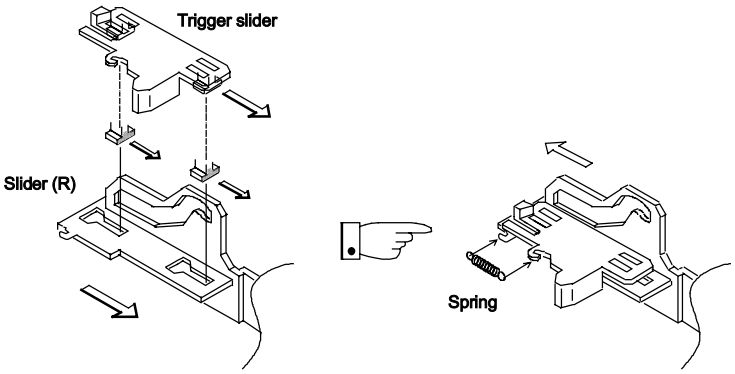
(2) Basic construction (Initial position of the planetary gear mechanism)

1) Even after the disc has been inserted, the motor rotated and the gear train also rotated, slider (R) does not start operation yet.This is because the planetary gear mechanism is used and the carrier gear is locked by the slider mechanism. In this period, the planetary gear is in the loose condition.
2) When the sun gear is rotating and the carrier gear is locked, the planetary gear is running idle.



(3) Basic construction (Construction of the trigger slider and slider (R))

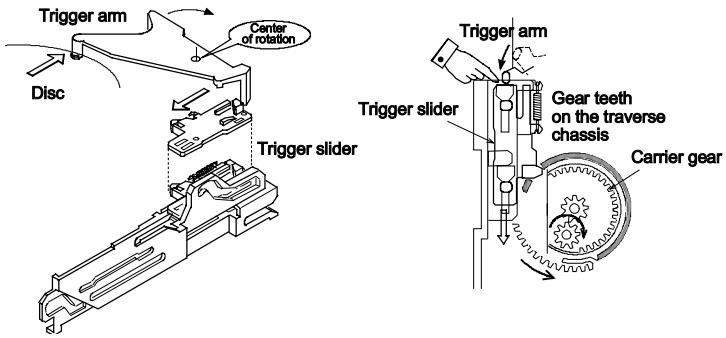
The trigger slider is assembled with slider (R) and pushed in the direction of the arrow by the force of a spring.



(4) Operation of slider (R)

1) Activating the trigger slider

When the trigger arm is rotated by the pressure of the disc, the trigger arm pushes the trigger slider.

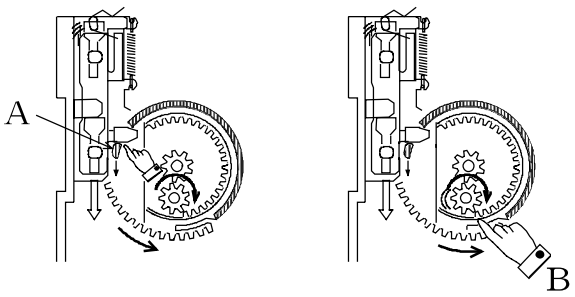


2) Rotating (engaging) the planetary gear

When the trigger slider is moved, it pushes down the wall (section A) of the carrier gear. (Initial rotation of the carrier gear)

This causes the planetary gear, which is attached on a pin of the carrier gear, to move according to the rotation of the carrier gear. When the planetary gear is meshed with a gear tooth (section B) of the traverse chassis, the planetary gear starts rotation.

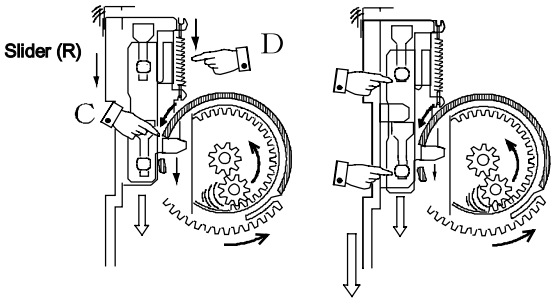
The rotation of the planetary gears causes the carrier gear to rotate.



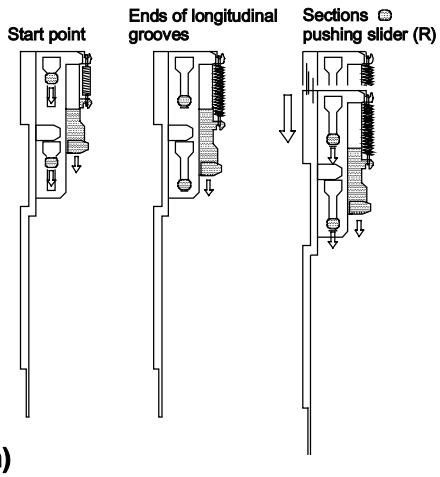
3) Activating slider (R)

When the carrier gear rotates, its wall (section C) pushes and moves the trigger slider.

When the trigger slider is moved, slider (R) is pulled by the force of spring (section D).



When the trigger slider moves along the longitudinal grooves on slider (R) till the ends of grooves, the trigger slider itself begins to push and move slider (R).



[3] Flow Until Disc Chucking (Playback Standby Condition)

(1) Functions activated by slider (R)

1) Operation modes

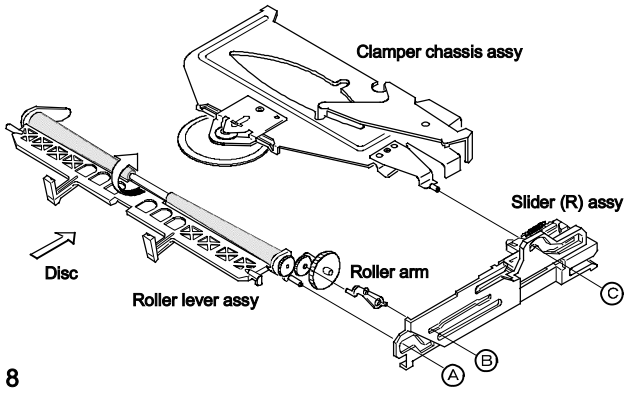
To play back a CD, it is required to perform a flow of operations as shown below.

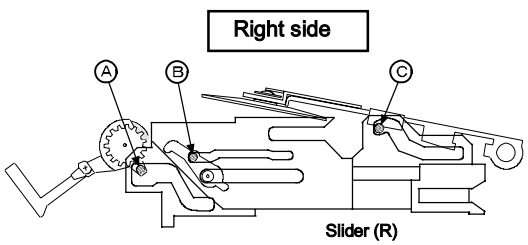
- Pulling the disc in and stopping the roller rotations after it.
- Moving the clamper downwards so that it can clamp the disc during playback. (Disc chucking)
- Moving the rollers that are in contact with the disc. (Lowering the roller lever)
- Float (suspend) the mechanism in order to protect it from vehicle vibrations during disc playback.
- Moving the pickup (optical ass'y) so that it can reads the disc signals.

These series of operations are activated by the movement of slider (R).

2) Coupling conditions

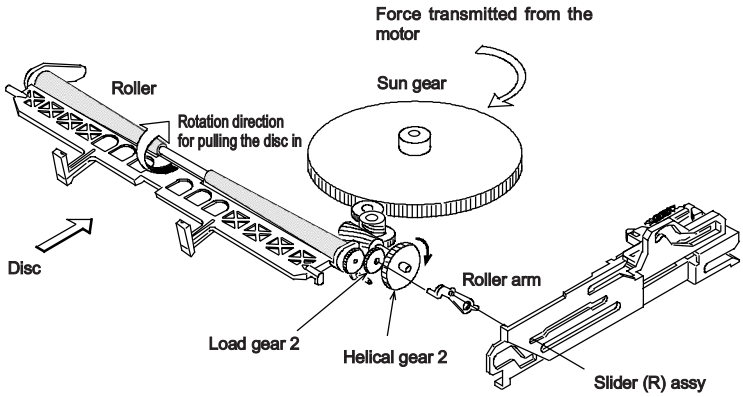
The parts used for performing the above functions are coupled with slider (R) as shown below.





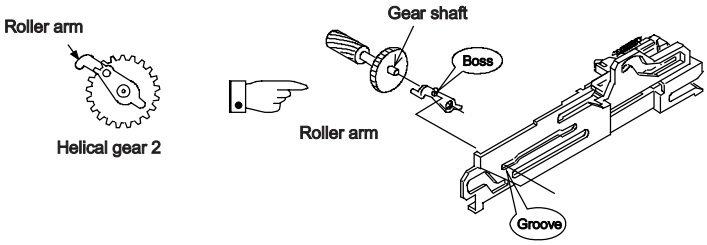
3) Rotation of rollers during disc loading

As shown in the following figure, the motor rotation force is transmitted through sun gear → helical gear 2 → load gear 2 to the gear that is coupled directly with the roller shaft to rotate the rollers and pull in the disc.

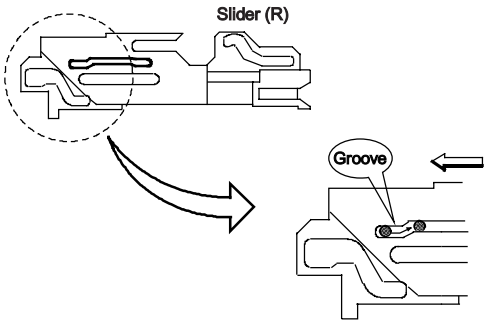


(2) How to stop the roller rotation

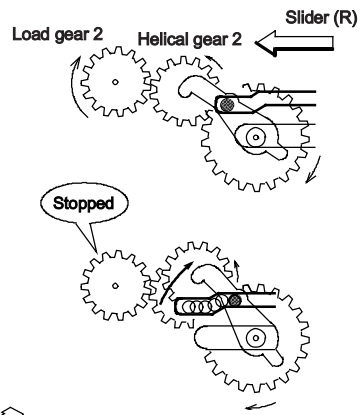
The boss of the roller arm is engaged with a groove on slider (R).



When slider (R) moves, the boss of the roller arm moves along the groove of slider (R), thereby separating the helical gear 2 coupled with it from load gear 2.



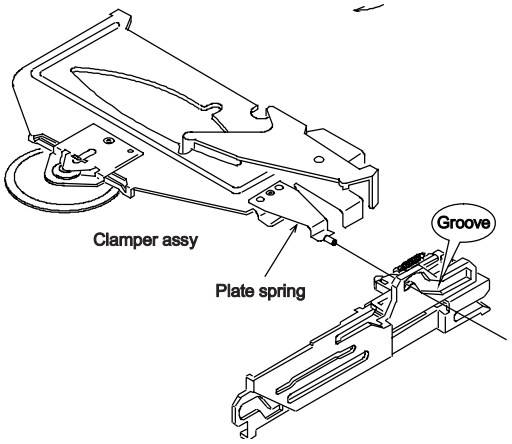
This stops transmission of the force to the rollers so the rollers stop.



(3) Operation of the clamper (Disc chucking)

1) Engaged condition

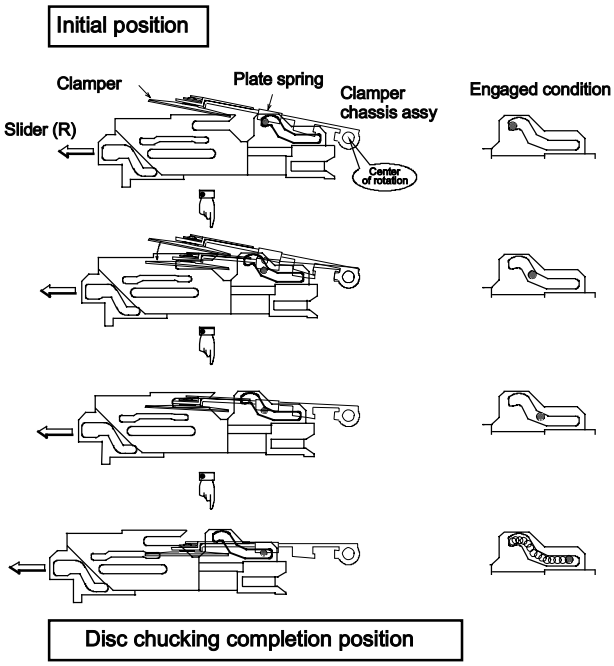
The plate spring attached to the clamper chassis is originally engaged with a groove on slider (R).



2) Lowering the clamper (for disc chucking)

As slider (R) moves, the plate spring section engaged with it moves along its groove and lowers the clamper chassis assembly.

The following figure shows the flow of operation.

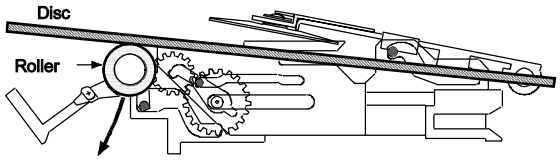


(4) How to lower the rollers

1) Disc chucking completion position

When the disc in this position, the rollers are located below the disc and in contact with it.

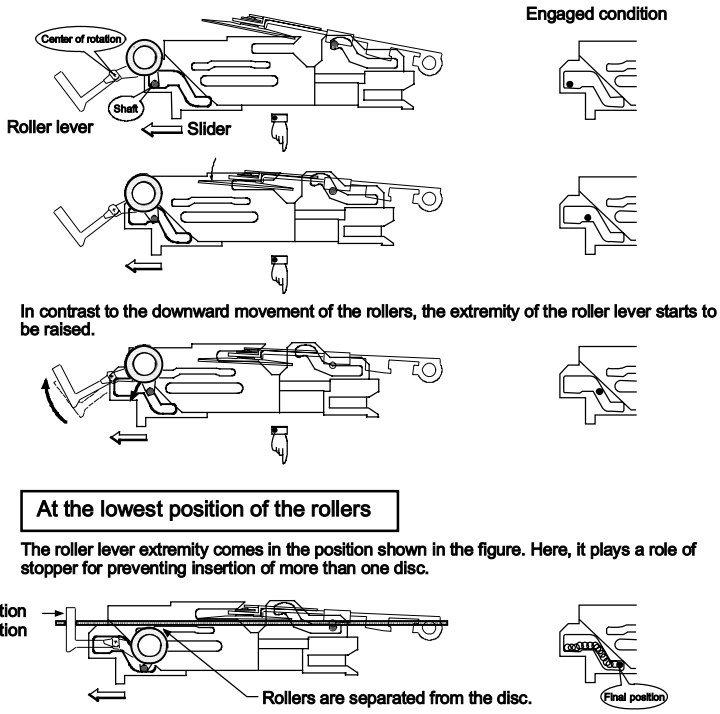
To rotate the disc for playback, it is required to separate the rollers from the disc.



2) Lowering the rollers (Disc playback position)

As slider (R) moves, the roller lever shaft engaged with a groove on slider (R) moves along the groove and lowers the rollers.

The following figure shows the flow of operation.


Engaged condition
Center of rotation
Shaft
Roller lever
Slider
In contrast to the downward movement of the rollers, the extremity of the roller lever starts to be raised.
At the lowest position of the rollers
The roller lever extremity comes in the position shown in the figure. Here, it plays a role of stopper for preventing insertion of more than one disc.
2-disc insertion prevention
Rollers are separated from the disc.
Final position

(5) Floating position and lock position of the mechanism

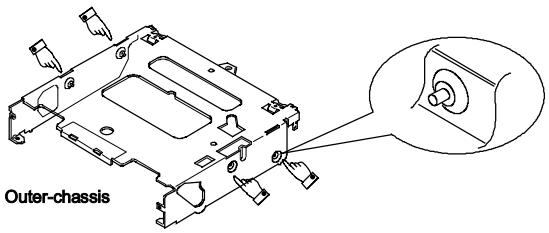
The disc is loaded and ejected by rotation of the rollers that come in close contact with the disc.

After the disc has been pulled in by the rollers, its position should be adjusted so that it can be placed precisely on the turntable of the traverse chassis. To make this possible, the traverse chassis and outer chassis should be in the locked condition.

Since the outer chassis is originally locked on the main unit, if the traverse chassis is also locked during playback, the disc would be subjected directly to vibrations of vehicle during driving and the disc signal would be hindered, making the audio intermittent or impossible to be played.

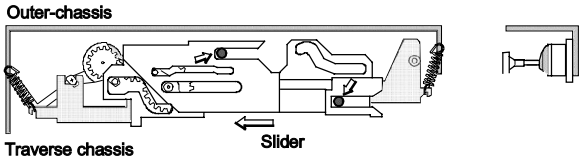
To prevent such a problem, the traverse chassis is suspended from the outer case using springs or rubber dampers during driving. This positioning protects the disc playback operations and is referred to as the floating position.

Shafts for locking the traverse chassis (Outer case-integrated design)
(4 shafts)

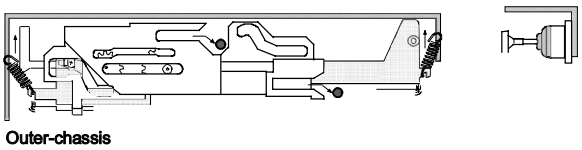


Mechanism lock position

The shafts of the outer chassis are inserted into the grooves on the sliders.



Mechanism floating position



(6) Function of slider (L)

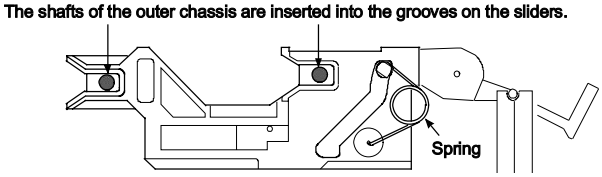
Slider (L) ensures the mechanism lock position because the shafts of the outer chassis are inserted into its grooves in the same way as they are inserted into the grooves on slider (R).

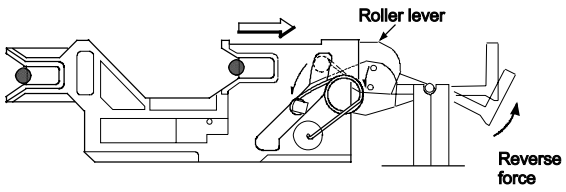
As slider (R) moves, the force moving the roller lever is transmitted to slider (L), which also starts the sliding movement.

When the spring is compressed gradually to a certain point, the force changes to a reverse force, which supports the jump-up operation of the roller lever.

Mechanism lock position

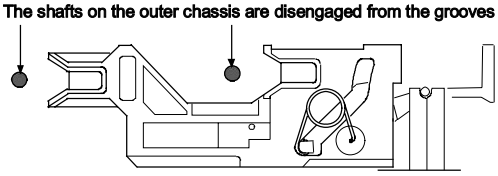
The shafts of the outer chassis are inserted into the grooves on the sliders.





Mechanism floating position

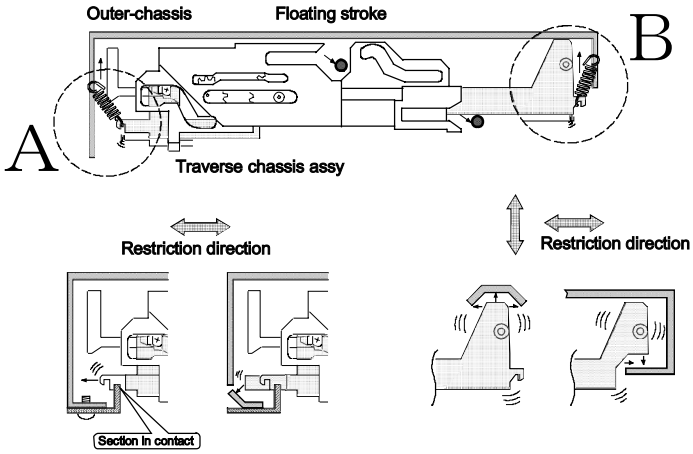
The shafts on the outer chassis are disengaged from the grooves on the slider.



(7) Floating stroke

When the traverse chassis assembly is in the mechanism floating position, stoppers should be provided between the outer case and traverse chassis assembly in order to prevent the mechanism from being damaged by vibrations and shocked of the vehicle.

The distance between the traverse chassis assembly and stoppers, that is, the range in which the traverse chassis assembly can move freely, is referred to as the floating stroke.

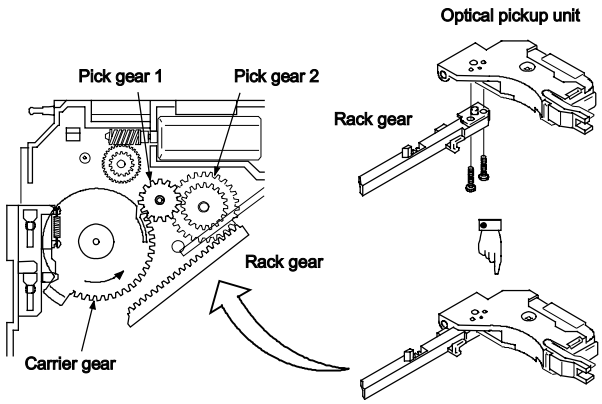


(8) Operation of the pickup

1) Construction

The optical pickup unit is attached on the rack gear.

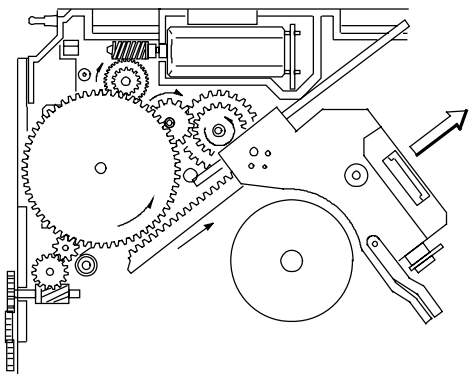
The following figure shows the positioning of the gears.

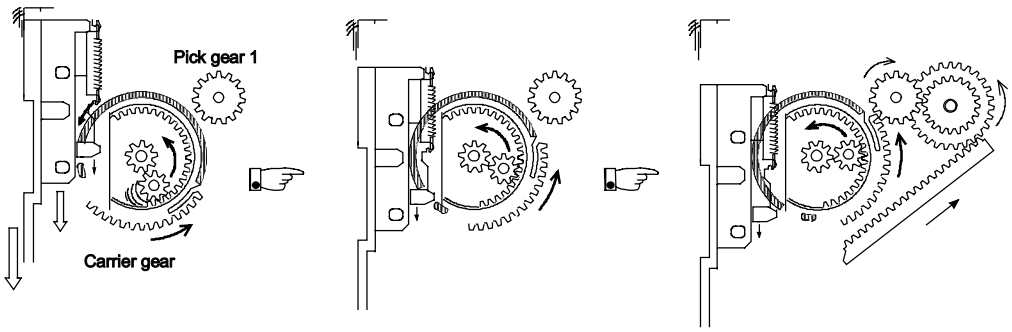


2) Activating the pickup

After the above series of operations have completed and the disc is put in the playback condition, the carrier gear rotates further and is meshed with pick gear 1. The force is then transmitted through pick gear 2 to the rack gear, causing the optical pickup unit to move.

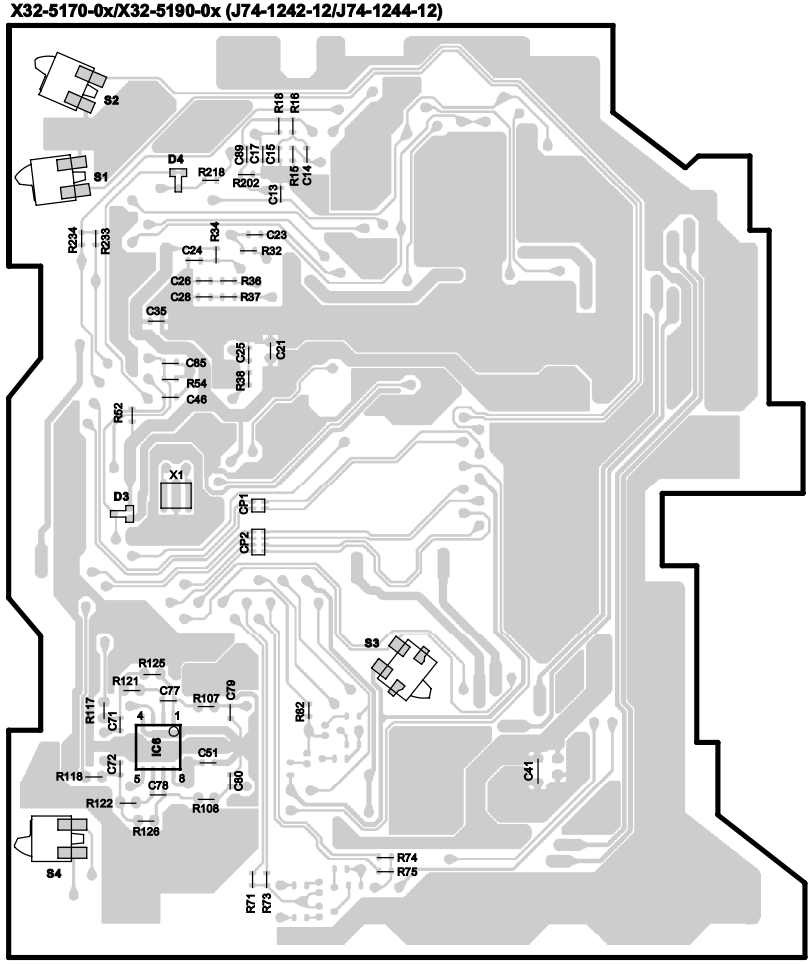
The operation of the optical pickup unit is controlled by the servo circuitry.





PC BOARD (COMPONENT SIDE VIEW)

X32-5170-0x/X32-5190-0x (J74-1242-12/J74-1244-12)



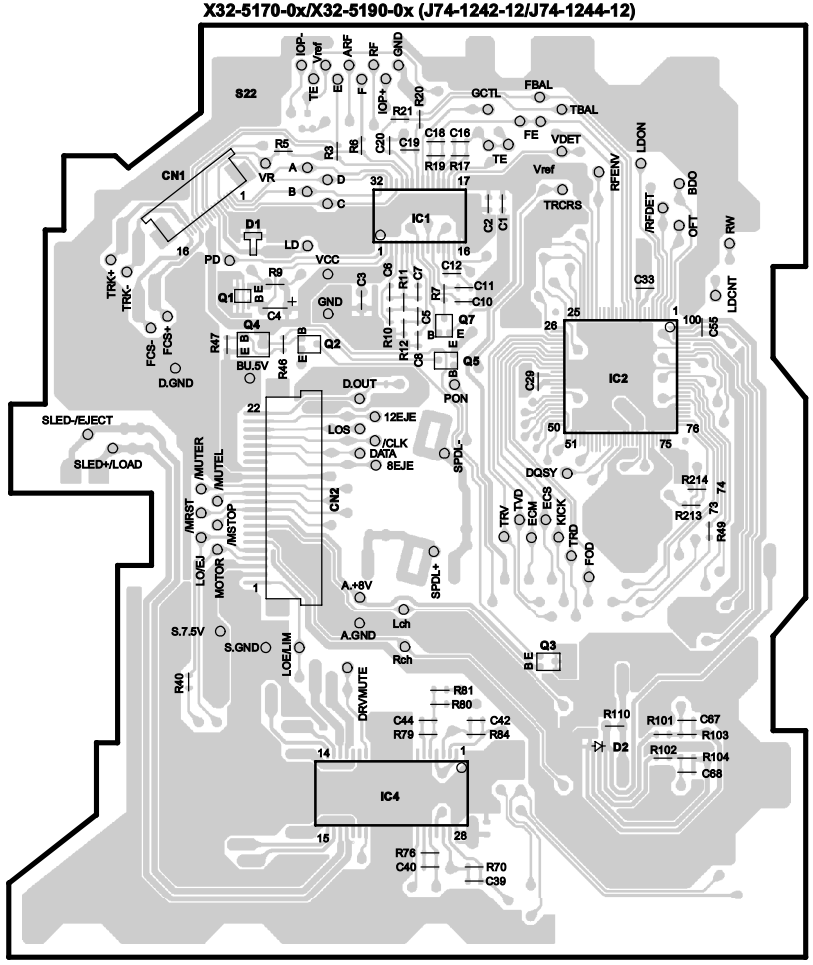
X32-5170-0x
X32-5190-0x

IC	6
Q	
addres	5B

Refer to the schematic diagram for the values of resistors and capacitors.

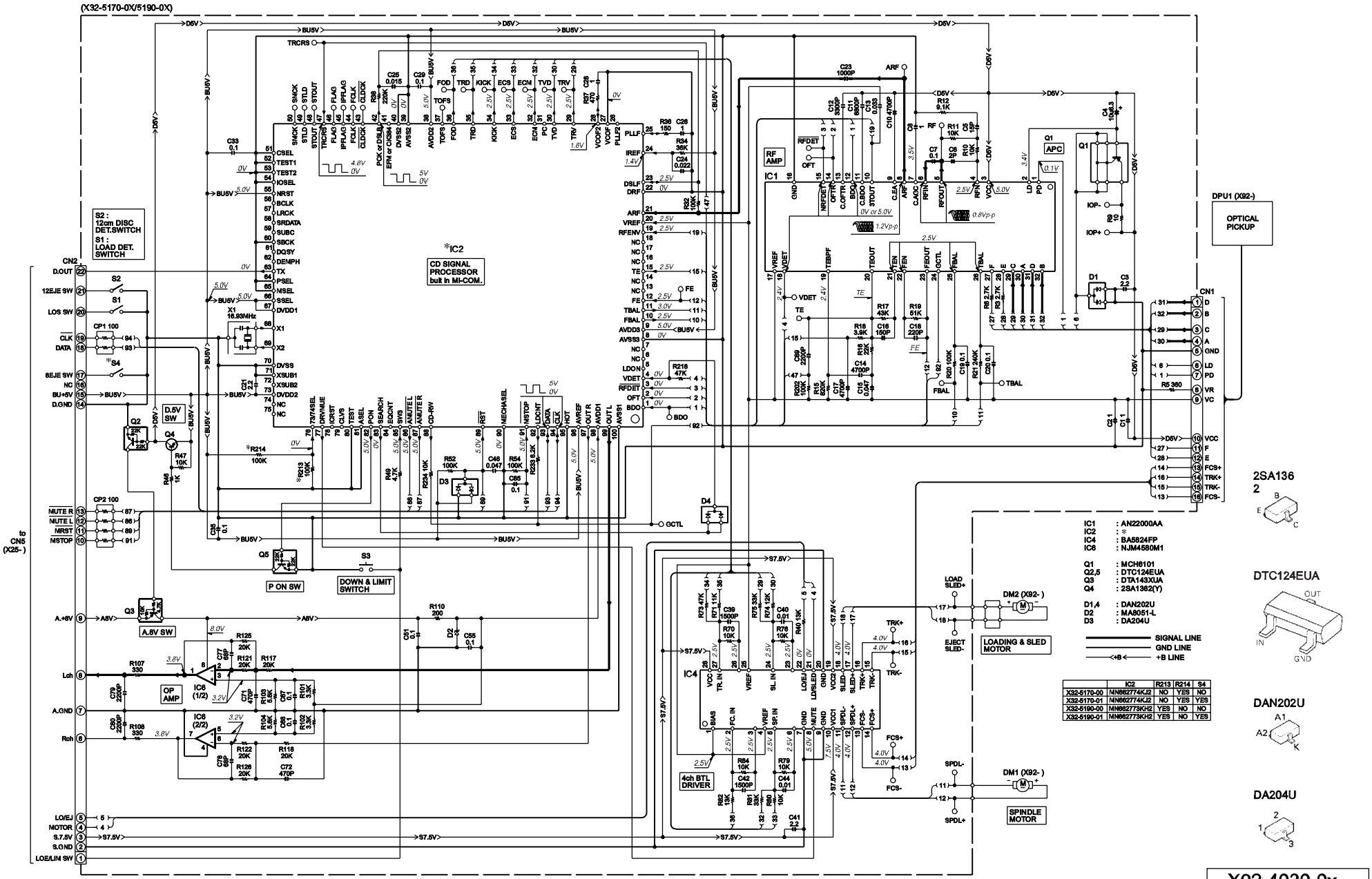
PC BOARD (FOIL SIDE VIEW)

X32-5170-0x/X32-5190-0x (J74-1242-12/J74-1244-12)



X32-5170-0x/X32-5190-0x

IC	1	2	4						
Q				1	2	3	4	5	
addres	3H	3I	5H	3G	3G	5I	3G	3H	



	IC2	R213	R214	S4
X32-5170-00	MN662774KJ2	NO	YES	NO
X32-5170-01	MN662774KJ2	NO	YES	YES
X32-5190-00	MN662773KH2	YES	NO	NO
X32-5190-01	MN662773KH2	YES	NO	YES

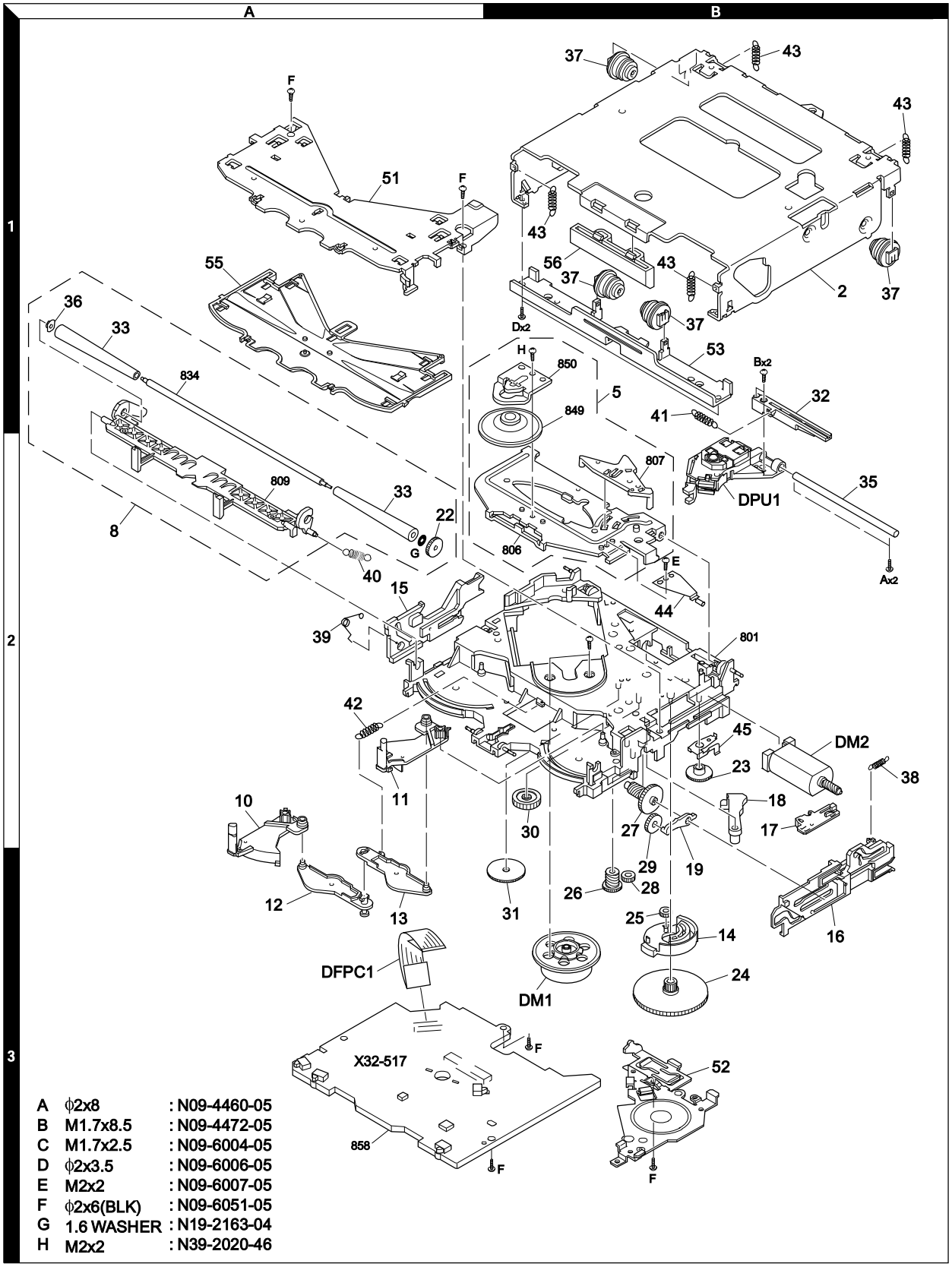
CAUTION : For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).
⚠ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

- DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

X92-4030-0x
X92-4440-0x

KENWOOD

EXPLODED VIEW



A	ϕ2x8	: N09-4460-05
B	M1.7x8.5	: N09-4472-05
C	M1.7x2.5	: N09-6004-05
D	ϕ2x3.5	: N09-6006-05
E	M2x2	: N09-6007-05
F	ϕ2x6(BLK)	: N09-6051-05
G	1.6 WASHER	: N19-2163-04
H	M2x2	: N39-2020-46

Parts with the exploded numbers larger than 700 are not supplied.

X92-4030-0x
X92-4440-0x

PARTS LIST

*New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

Ref. No.	Add	New	Parts No.	Description	Destination
CD PLAYER UNIT (X32-5170-0x, X32-5190-0x)					
C1,2			CK73GB0J105K	CHIP C 1.0UF K	
C3			CK73FB1A225K	CHIP C 2.2UF K	
C4			C92-0566-05	CHIP-TAN 10UF 6.3WV	
C5			CC73GCH1H150J	CHIP C 15PF J	
C6			CC73GCH1H020C	CHIP C 2.0PF C	
C7			CK73GB1C104K	CHIP C 0.10UF K	
C8			CK73GB0J105K	CHIP C 1.0UF K	
C10			CK73GB1H472K	CHIP C 4700PF K	
C11			CK73GB1H682K	CHIP C 6800PF K	
C12			CK73GB1H332K	CHIP C 3300PF K	
C13			CK73GB1C333K	CHIP C 0.033UF K	
C14			CK73GB1H472K	CHIP C 4700PF K	
C15			CK73GB1E473K	CHIP C 0.047UF K	
C16			CC73GCH1H151J	CHIP C 150PF J	
C17			CK73GB1H472K	CHIP C 4700PF K	
C18			CC73GCH1H221J	CHIP C 220PF J	
C19,20			CK73GB1C104K	CHIP C 0.10UF K	
C21			CK73FB1A225K	CHIP C 2.2UF K	
C23			CK73GB1H102K	CHIP C 1000PF K	
C24			CK73GB1E223K	CHIP C 0.022UF K	
C25			CK73GB1H153K	CHIP C 0.015UF K	
C26			CK73GB0J105K	CHIP C 1.0UF K	
C28			CK73GB0J105K	CHIP C 1.0UF K	
C29			CK73GB1C104K	CHIP C 0.10UF K	
C33			CK73GB1C104K	CHIP C 0.10UF K	
C35			CK73GB1C104K	CHIP C 0.10UF K	
C39			CK73GB1H152K	CHIP C 1500PF K	
C40			CK73GB1H103K	CHIP C 0.010UF K	
C41			CK73EB1C225K	CHIP C 2.2UF K	
C42			CK73GB1H152K	CHIP C 1500PF K	
C44			CK73GB1H103K	CHIP C 0.010UF K	
C46			CK73GB1E473K	CHIP C 0.047UF K	
C51			CK73GB1C104K	CHIP C 0.10UF K	
C55			CK73GB1C104K	CHIP C 0.10UF K	
C67,68			CK73GB1C104K	CHIP C 0.10UF K	
C71,72			CK73GB1H471K	CHIP C 470PF K	
C77,78			CC73GCH1H680J	CHIP C 68PF J	
C79,80			CK73GB1H222K	CHIP C 2200PF K	
C85			CK73GB1C104K	CHIP C 0.10UF K	
C89			CK73GB1H222K	CHIP C 2200PF K	
CN1			E40-9536-05	FLAT CABLE CONNECTOR (16p)	
CN1		*	E41-0193-05	FLAT CABLE CONNECTOR (16p)	
CN2			E40-9339-05	FLAT CABLE CONNECTOR (22P)	
CN2			E41-0129-05	FLAT CABLE CONNECTOR	
X1			L78-0572-05	RESONATOR 16.93MHZ	
CP1			R90-1019-05	MULTI-COMP 100 X2	
CP2			R90-1014-05	MULTI-COMP 100 X4	
R3			RK73GB2A272J	CHIP R 2.7K J 1/10W	
R5		*	RK73GB2A361J	CHIP R 360 J 1/10W	
R6			RK73GB2A272J	CHIP R 2.7K J 1/10W	
R9			RK73FB2B100J	CHIP R 10 J 1/8W	
R10,11			RK73GB2A103J	CHIP R 10K J 1/10W	

Ref. No.	Add	New	Parts No.	Description	Destination
R12		*	RK73GB2A912J	CHIP R 9.1K J 1/10W	
R15		*	RK73GB2A824J	CHIP R 820K J 1/10W	
R16			RK73GB2A223J	CHIP R 22K J 1/10W	
R17			RK73GB2A433J	CHIP R 43K J 1/10W	
R18		*	RK73GB2A392J	CHIP R 3.9K J 1/10W	
R19		*	RK73GB2A513J	CHIP R 51K J 1/10W	
R20			RK73GB2A104J	CHIP R 100K J 1/10W	
R21		*	RK73GB2A244J	CHIP R 240K J 1/10W	
R32		*	RK73GB2A683J	CHIP R 68K J 1/10W	
R34		*	RK73GB2A363J	CHIP R 36K J 1/10W	
R36			RK73GB2A151J	CHIP R 150 J 1/10W	
R37			RK73GB2A471J	CHIP R 470 J 1/10W	
R38		*	RK73GB2A224J	CHIP R 220K J 1/10W	
R40		*	RK73GB2A133J	CHIP R 13K J 1/10W	
R46			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R47			RK73GB2A103J	CHIP R 10K J 1/10W	
R49			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R52			RK73GB2A104J	CHIP R 100K J 1/10W	
R54			RK73GB2A104J	CHIP R 100K J 1/10W	
R70			RK73GB2A103J	CHIP R 10K J 1/10W	
R71		*	RK73GB2A113J	CHIP R 11K J 1/10W	
R73			RK73GB2A473J	CHIP R 47K J 1/10W	
R74			RK73GB2A123J	CHIP R 12K J 1/10W	
R75			RK73GB2A333J	CHIP R 33K J 1/10W	
R76			RK73GB2A103J	CHIP R 10K J 1/10W	
R79,80			RK73GB2A103J	CHIP R 10K J 1/10W	
R81			RK73GB2A333J	CHIP R 33K J 1/10W	
R82		*	RK73GB2A133J	CHIP R 13K J 1/10W	
R84			RK73GB2A103J	CHIP R 10K J 1/10W	
R101,102		*	RK73GB2A332J	CHIP R 3.3K J 1/10W	
R103,104			RK73GB2A562J	CHIP R 5.6K J 1/10W	
R107,108			RK73FB2B331J	CHIP R 330 J 1/8W	
R110		*	RK73FB2B201J	CHIP R 200 J 1/8W	
R117,118		*	RK73FB2B203J	CHIP R 20K J 1/8W	
R121,122		*	RK73FB2B203J	CHIP R 20K J 1/8W	
R125,126		*	RK73FB2B203J	CHIP R 20K J 1/8W	
R202			RK73GB2A104J	CHIP R 100K J 1/10W	
R214			RK73GB2A104J	CHIP R 100K J 1/10W	
R218			RK73GB2A473J	CHIP R 47K J 1/10W	
R233		*	RK73GB2A622J	CHIP R 6.2K J 1/10W	
R234			RK73GB2A103J	CHIP R 10K J 1/10W	
S1,2		*	S68-0863-05	PUSH SWITCH	
S3		*	S68-0862-05	PUSH SWITCH	
S4		*	S68-0864-05	PUSH SWITCH	A2A3
S4		*	S68-0864-05	PUSH SWITCH	B2B3
D1			DAN202U	DIODE	
D2			MA8051-L	ZENER DIODE	
D3			DA204U	DIODE	
D4			DAN202U	DIODE	
IC1			AN22000AA	ANALOGUE IC	
IC2		*	MN662773KH2	MOS-IC	B0B1B2
IC2		*	MN662773KH2	MOS-IC	B3B4B5
IC2		*	MN662774KJ2	MOS-IC	A0A1A2
IC2		*	MN662774KJ2	MOS-IC	A3A4A5

A0 : X92-4030-00 (DXM-6000W) A3 : X92-4030-03 (DXM-6003W)
A1 : X92-4030-01 (DXM-6001W) A4 : X92-4030-04 (DXM-6004W)
A2 : X92-4030-02 (DXM-6002W) A5 : X92-4030-05 (DXM-6005W)

B0 : X92-4440-00 (DXM-6100W) B3 : X92-4440-03 (DXM-6103W)
B1 : X92-4440-01 (DXM-6101W) B4 : X92-4440-04 (DXM-6104W)
B2 : X92-4440-02 (DXM-6102W) B5 : X92-4440-05 (DXM-6105W)

PARTS LIST

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Ref. No.	Add	New	Parts No.	Description	Destination
IC4		*	BA5824FP	ANALOGUE IC	
IC6		*	NJM4580M1	ANALOGUE IC	
Q1			MCH6101	TRANSISTOR	
Q2			DTC124EUA	DIGITAL TRANSISTOR	
Q3			DTA143XUA	DIGITAL TRANSISTOR	
Q4			2SA1362(Y)	TRANSISTOR	
Q5			DTC124EUA	DIGITAL TRANSISTOR	
CD MECHANISM ASSY (X92-4030-0x, X92-4440-0x)					
2	1B	*	A10-4827-12	CHASSIS OUTER	
5	2B	*	D10-4576-23	ARM ASSY CLAMP	
8	2A	*	D10-4579-03	LEVER ASSY ROLLER	
10	3A	*	D10-4581-13	ARM DISC-L	
11	2A	*	D10-4582-13	ARM DISC-R	
12	3A	*	D10-4583-03	ARM JOINT-L	
13	3A	*	D10-4584-03	ARM JOINT-R	
14	3B	*	D10-4585-03	ARM CARRIER	
15	2A	*	D10-4586-03	SLIDER L	
16	3B	*	D10-4587-02	SLIDER R	
17	3B	*	D10-4588-03	SLIDER TRIG	
18	3B	*	D10-4595-04	ARM LOCK	
19	3B	*	D10-4596-04	ARM ROLLER	
22	2A	*	D13-2151-04	GEAR ROLLER	
23	2B	*	D13-2152-04	GEAR HELICAL-1	
24	3B	*	D13-2153-04	GEAR SUN	
25	3B	*	D13-2154-04	GEAR PLANET	
26	3B	*	D13-2155-04	WORM 2	
27	3B	*	D13-2156-04	GEAR HELICAL-2	
28	3B	*	D13-2157-04	GEAR LOAD-1	
29	3B	*	D13-2158-04	GEAR LOAD-2	
30	3B	*	D13-2168-04	GEAR PICK-1	
31	3B	*	D13-2171-04	GEAR PICK-2	
32	2B	*	D13-2172-03	RACK (GEAR)	
33	2A	*	D14-0759-04	ROLLER N100X3DIES	
35	2B	*	D21-2382-04	SHAFT PICK	
36	1A	*	D23-0954-04	RETAINER	
37	1B	*	D39-0246-05	DAMPER	
38	2B	*	G01-3072-04	EXTENSION SPRING TRIGGER	
39	2A	*	G01-3073-04	TORSION COIL SPRING ROLLER-L	
40	2A	*	G01-3074-04	EXTENSION SPRING ROLLER-R	
41	2B	*	G01-3075-04	EXTENSION SPRING PICKUP	
42	2A	*	G01-3076-04	EXTENSION SPRING JOINT-SP	
43	1B	*	G01-3077-04	EXTENSION SPRING FLOATTING	
44	2B	*	G02-1399-04	FLAT SPRING CLAMP	
45	2B	*	G02-1408-04	FLAT SPRING WORM	
51	1A	*	J21-9676-12	MOUNTING HARDWARE GUIDE-BKT	
52	3B	*	J21-9677-02	MOUNTING HARDWARE GEAR-BKT	
53	1B	*	J21-9678-03	MOUNTING HARDWARE DAMPER-BKT	
55	1A	*	J90-1001-11	GUIDE 1	
56	1B	*	J90-1023-03	GUIDE 2	
DFPC1	3A	*	J84-0128-15	FLEXIBLE P.W.B. PICK-FPC	
A	2B	*	N09-4460-05	TAPTITE SCREW PT2X8-SARA	
B	1B	*	N09-4472-05	MACHINE SCREW PICK-RACK	

Ref. No.	Add	New	Parts No.	Description	Destination
C	2B	*	N09-6004-05	MACHINE SCREW M1.7X2.5	
D	1B	*	N09-6006-05	TAPTITE SCREW ST-2X3.5	
E	2B	*	N09-6007-05	MACHINE SCREW M2X2	
F	1A	*	N09-6051-05	TAPTITE SCREW PT2X6-BIND	
G	2A	*	N19-2163-04	FLAT WASHER 1.6X0.25	
H	1B	*	N39-2020-46	MACHIN SCREW M2X2	
DM1	3B	*	T42-1066-04	DC MOTOR ASSY SP	
DM2	2B	*	T42-1067-04	DC MOTOR ASSY LO	
DPU1	2B	*	T25-0223-05	OPTICAL PICKUP HEAD	

A0 : X92-4030-00 (DXM-6000W) A3 : X92-4030-03 (DXM-6003W)
A1 : X92-4030-01 (DXM-6001W) A4 : X92-4030-04 (DXM-6004W)
A2 : X92-4030-02 (DXM-6002W) A5 : X92-4030-05 (DXM-6005W)

B0 : X92-4440-00 (DXM-6100W) B3 : X92-4440-03 (DXM-6103W)
B1 : X92-4440-01 (DXM-6101W) B4 : X92-4440-04 (DXM-6104W)
B2 : X92-4440-02 (DXM-6102W) B5 : X92-4440-05 (DXM-6105W)

X92-4030-0x
X92-4440-0x

SPECIFICATIONS

Laser Diode	GaAlAs (λ=780nm)
Digtal Filter (D/A)	8 Times Over Sampling
D/A Converter	1 Bit
Spindle Speed	500~200 (CLV)
Wow & Flutter	Below Measurable Limit
Frequency Response	10-20kHz (±1dB)
THD	0.01% (1kHz)
S/N Ratio (dB)	96dB (1kHz)
Dynamic Range	93dB
Channel Separation	85dB

KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

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